NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

VOL. XIII. BOSTON, AUGUST, 1861. NO. 8.

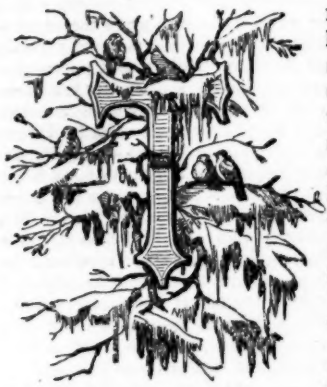
NOURSE, EATON & TOLMAN, PROPRIETORS.
OFFICE A...34 MERCHANTS' ROW.

SIMON BROWN, EDITOR.

FRED'K HOLBROOK, } ASSOCIATE
HENRY F. FRENCH, } EDITORS.

FOR A WET DAY IN AUGUST.

Whether we look or whether we listen,
We hear Life murmur, or see it glisten;
Every clod feels a stir of might,
An instinct within it that reaches and towers,
And grasping blindly above it for light,
Climbs to a soul in grass and flowers. LOWELL.



THE farmer's life is necessarily one of active industry; it should also be one of happiness. No occupation affords such various resources, both of emolument and pleasure, as farming, when judiciously and intelligently pursued. The New England farmer should, in the first place, settle his mind to the necessity of vigorous individual action, and of active inquiry into the various modes of enlarging the sphere of his professional efforts, and their emoluments. He should not repose with a humble and contented ambition upon the platform of past ages, or upon the obsolete usages of those who, in the primal days of American agriculture, were compelled to open pathways for the sun into the bosom of dense and trackless forests, and to extort the means of subsistence from a soil which was yet incumbered with almost insuperable impediments.

There is no reason why the union of intelligence, capital, and power, should not be as productive of happy results, in agriculture, as in other pursuits. Within the last twenty years the hand of science has accomplished wonders in the way of improvements, and even within the last ten years the changes which have been introduced into the manipulatory processes of the art, have so far lessened its toils, and augmented its results, as to render the pursuit of farming one of the most agreeable and profitable of human avocations.

The farmer—if a true man—now strives to excel in intelligence, as well as in wealth. He frequently has his library, and his cabinet of minerals, and is emulous of understanding the "why and wherefore" of the various theories and processes he adopts and practices in the cultivation of his crops, the management of his stock, and the general routine of his domestic and personal affairs. It is a common saying in politics, that "revolutions never go backward;" and it is equally true, perhaps, in the generality of cases, that the human mind once stimulated to an interested pursuit of knowledge will neither retrograde nor pause, but press onward towards the goal with constantly increasing ardor and success to the attainment of objects presented to its grasp.

What a contrast is presented, in this particular between the freeborn American farmer, and the English peasant. Speaking of the latter, a late writer, himself an Englishman, observes:—"He feels that he is a mere serf, among the great and free; a mere machine in the hands of the mighty, who use him as such. He sees the sunshine of grandeur, but does not feel its warmth. He hears that the great folks are wise; but all *he* knows is that their wisdom does not trouble itself about his ignorance. He asks, with the "FARMER'S BOY,"—

"Whence comes this change, ungracious, irksome, cold?
Whence this new grandeur that mine eyes behold?
The widening distance that I daily see?
Has wealth done this? Then wealth's a foe to me!
Foe to my rights, that leaves a powerful few
The paths of emulation to pursue."

But even this rough block from the quarry of ignorance, is capable of being chiselled and polished, and sent forth into the great thorough-

fares of life, a being of beauty and power—capable of grasping the mysteries of the universe, and of holding converse with the stars. It was of such materials that the armies were formed which won at Cressy, at Agincourt, and at Waterloo; and it was with seamen taken in part from the same degraded class, that the fleets which won imperishable glory to the cross of St. George at Camperdown, and at Trafalgar, were manned! For the American farmer there is a future radiant with glorious promise. He feels that he *is a man*, and capable of verifying, by his character and deeds, the truth of the poetical axiom, that

"A bold yeomanry is a country's pride,"

and that to be restricted in thought and opinion, and confined in activity by ignorance, is a species of mental serfdom at variance with the instincts of his nature, and antagonistic to the principles of that freedom which is one of the chief guarantees and safeguards of the government under which he lives. No man enjoys better advantages for mental improvement than the farmer, and by no class of men, as a general thing, perhaps, are these advantages turned to more profitable account. The multiplication of text-books and even of exhaustive works on the sciences immediately connected with agriculture, and the institution of societies, clubs and public lectures—all designed for the promotion of the chief interests of the art—bring within his reach all the means that can reasonably be desired.

Knowledge thus brought to his fireside, must have a most salutary influence, and, in time, be productive of great good, by elevating the mind, strengthening the understanding, and purifying the affections which link together in indissoluble bonds, the great brotherhood of man.

"Corruption in the great mass of cultivators," says Jefferson, "is a phenomenon of which no age or nation has presented an instance." Of all men the farmer has the best opportunity to cultivate his taste and improve his mind by study. The long winter evenings, and occasional hours for relaxation from labor through the year, afford ample time for this, and for this purpose they will by most persons, be improved. The cultivation of the mind is of greater importance than the cultivation of the soil, so far as solid enjoyment and genuine happiness are involved.

SKIPPERS, &C.—To exterminate skippers and eggs make a strong decoction of elder leaves and young twigs, and immerse the ham into it, boiling hot, for a minute or two. No bad taste or flavor is given the meat, while insect and egg is utterly destroyed. Applied cold it will be found just as effective on the live animal. The leaves and twigs scattered about a room, and renewed as they become dry, will drive out roaches and other kindred insects. I have driven ground-moles from particular beds in my garden, when troublesome, by inserting green leaves in their back paths.

CULTIVATION OF OUR NATIVE PINES.

The White pine, *(Pinus Strobus,)* called in England the Weymouth pine, was one of the first American trees introduced into that country, where it has always been highly prized as an ornamental tree. It has been more thoroughly appreciated in England than in America; but no person doubts its value, either to be planted as a timber or forest tree, or as an ornamental appendage to one's estate. According to Gen. Dearborn, who devoted a great deal of attention to tree culture, "the cones of the White pine must be gathered early in autumn, as the scales open about the first of October, when the seeds are released, which being furnished with a membranous wing, are speedily scattered by the winds to a great distance. The cones when collected should be laid in some dry place, where the scales will open, and the seeds can then be easily shaken out."

The time for sowing them is when the ground is first open in the spring, which is usually about the first part of April, on beds of well pulverized soil. They may be planted still earlier than this in pots, which can be placed in any change of situation that may be required. In England it is usual to cover the young plants with nets to prevent birds from picking off the tops of the little seedlings while the husks of the seeds are upon them; also to screen them from the heat of the sun. The young plants should be kept quite clean, and occasionally watered in a careful manner, so as not to deluge them and harden the earth round about them. If they come up too close, the plants should be thinned out in summer, and the surplus removed to a separate bed, protected by shade, and watered freely but carefully. They should be set in rows, four or five inches apart, with about the same distance between the rows.

When the plants are a year old, they should be transferred to other rows in the nursery, about two feet apart, and the same distance between the rows. Here it is customary to let them remain, until they are to be planted out. The best time for planting them out in our climate is during the first half of May. It is advisable not to allow them to attain a considerable size before they are planted out, as the smaller the plants, if not too small, the better they succeed. When large plantations are to be made, it is best to raise the plants on portions of the same ground, as it somewhat retards their growth to suffer a complete change of soil. It is also beneficial to their growth to transplant them once in two years, as by this process they obtain better roots, and acquire, by habit, the power of sustaining the operation with impunity, so that they may be afterwards transplanted into any soil with complete success. In all cases, when transplanting them, care should be taken not to cut or wound any portion either of the roots or branches.—*Hovey's Magazine.*

For the New England Farmer.

RURAL ECONOMY.

MR. EDITOR:—I wish to offer a few brief remarks on rural economy, a subject which commends itself to the consideration of every farmer as it lies at the very foundation of all good farming. In fact, I do not believe there is any such thing as good, successful and profitable farming, without economy in the use of all the means employed to promote the object, that is, in the use of money, time and labor. There is no economy in spending $150 in money, time or labor in raising the best piece of corn in the county, which, after all, is not worth more than $140 in the market, without some other valuable object or end is also attained, besides the price of the corn as an offset to the expense. With a great expenditure of money, time and labor, a farmer of ample means can make all his lands "flourish and blossom as the rose," can raise prodigious great crops, and obtain, perhaps, all the premiums at the cattle show, in spite of the utmost efforts of his poor neighbor; when, in fact, his poor neighbor, by his skill and economy, in adapting all his means to his ends, shows himself to be the better, the more successful and profitable farmer.

Farming is always profitable, when conducted with skill and economy. Either alone will not be sufficient; they must be united in order to render farming successful and profitable. If any have failed in the business, it has been owing to either to the want of skill, or to the want of economy, or to the want of both united.

Poverty is a great and terrible burden to the young and intelligent farmer; and it imposes upon him the most rigid economy. None but the rich can farm it as well as he knows how, or indulge in any of the fanciful operations and experiments of the day. The poor man has not the means to carry out all his own plans of farm operations. He has not the means to cultivate fifteen or twenty acres, to purchase fancy fertilizers, and to try experiments on a large scale. No; he is a poor man, and, as such, he is obliged to practice the most rigid economy, and use all his means to the best advantage. He has not the means to purchase manure of any kind for his land; he must, therefore, plant one acre instead of twenty; and to enrich this one acre, he must resort to the sink-spout, the hen-roost, the ash-heap, the hog-pen, the barn-yard, the privy, for his fertilizers. He must, also, scrape up and gather together all the odds and ends of everything on and about his premises, which can be composted with the above and converted into manure, such as leaves from the forest, mud from the meadow, peat or marl from the bog, together with turfs, sods, roots, weeds, waste straw and hay, chip manure, &c. These, and such like when thoroughly composted, must be skillfully applied to his one acre; and he must continue the operation, till he is prepared to lay down this acre and take up another.

A farmer of moderate means must economize, not only in making and saving all the manure he can, and in applying it skillfully to a small extent of surface, but he must confine himself chiefly to the use of domestic manure of his own manufacture. In his circumstances, it will not do for him to purchase foreign fertilizers, such as guano, phosphates and superphosphates. At their present high prices they are too expensive for him; and in the end they will prove to be unprofitable. When first applied, for a year or so, their stimulating effects are truly wonderful; but they do not hold out; they do not, like domestic manure, increase the natural strength and fertility of the soil. Their effects upon the soil are very much like alcohol upon the human system—very exciting and stimulating for the present, but requiring a constant supply to keep up the excitement.

It is the chief concern of a good farmer, whether rich or poor, to practice economy in every line of his business, and in all his domestic affairs. All his money, all his time, all his talents and all his labors are directed to the one great, grand object of his calling, the enriching and cultivating the earth, the production of various kinds of crops, fruits and animals, the feeding and management of stock, the disposal of every kind of surplus productions, the saving of everything which can be converted to a useful purpose, or made to improve his condition. Above all, he avoids running into debt. He also avoids running to the banks to get his notes discounted; for he knows full well, that though they may be very polite and accommodating in granting him every bank facility in their power, and in shaving him very handsomely and gracefully when money is quite plenty; yet that when money gets to be scarce and the pinch comes, they will leave him to take care of himself by consulting the tender mercies of his creditors. He has made up his mind, therefore, not to spend his money before he gets it, but to live within his means, and upon his present income and profits. More especially has he made up his mind to disregard the croakings of those everlasting harpies, who, being too lazy, too proud, and too shiftless, to gain an honest and honorable living by their industry, economy and labor, are forever repeating that "farming is unprofitable."

Warwick, Mass. JOHN GOLDSBURY.

MICE UTILIZED BY A SCOTCHMAN.—A man in Scotland has trained a couple of mice to spin cotton very successfully. The work is so constructed that the common mouse is able to make atonement to society for past offences, by twisting twine, and reeling from 100 to 126 threads per day. To complete this, the little pedestrian has to run 10½ miles. A half-penny worth of oatmeal serves one of these tread-wheel spinners for the long period of five weeks. In that time it makes 110 threads per day. At this rate a mouse earns 7s. 6d. per annum. Take off 5d. for food, and 1s. for machinery, there will rise 6s. clear for every mouse per annum.

TO CORRESPONDENTS.—We have published several letters giving opinions of the merits of several mowing machines, and giving the names of the writers. We admit these discussions in the hope that it may be ascertained which the the best machine is. We have before us a letter from Hatfield, signed "J. E. W.," which we will cheerfully publish if he will send us his name.

For the New England Farmer.

RETROSPECTIVE NOTES.

FAT SOWS FOR BREEDERS.—This is the caption of an article in the June number of the *Farmer*, page 250, which will bring to the acquaintance of some of its readers a few of the somewhat peculiar methods of management in the raising and fattening of hogs, which have been adopted by one who has had very uncommon success, and who enjoys a very high reputation in this department of farming. This individual, who raises the cheapest pork and the heaviest pigs of any man "in all the country round," is JOHN SKAATS, of Alexander, Genesee county, New York. As only a few of the peculiarities of this very successful hog-breeder and pork-maker are mentioned in the article referred to, (see June number of the *N. E. Farmer*, page 250,) and as almost all the items in his mode of management are well worthy of consideration, and of imitation to a greater or less extent, it has seemed to me quite probable that several of the readers of this paper might derive some useful hints from a more detailed statement of the prominent characteristics of Mr. SKAATS' method of raising and fattening hogs. My information is derived partly from private sources, but mainly from sundry communications in regard to Mr. S.'s somewhat peculiar modes of management in the *Genesee Farmer* and the *Cultivator*, (Albany.)

A MODEL PORK-MAKER'S MODE OF MANAGEMENT.—First of all, Mr. S. never uses any sows for breeding, under a year and a half old, nor boars until they are of the same age, or, at least, over one year old. He continues to use the sows up to five or six years of age, and thinks they continue to improve as breeders up to that age. In this respect, his example is certainly worthy of imitation, and every man of common sense, even without the corrobating testimony of experience, must readily believe that pigs from sows and sires who have attained their maturity, must inherit far more healthy and vigorous constitutions than the progeny of parents which have not as yet attained their full growth or maturity. Indeed, breeding for three or four generations from sows or boars under one year of age, cannot fail to produce a deterioration of the progeny, or breed.

I cannot regard the next peculiarity in Mr. S.'s management with equal favor. I refer to his keeping his breeding sows pork-fat. Experience has taught me, and probably many others, that when cows are in quite high condition at the period of parturition, they are much more liable to attacks of milk or puerperal fever, and to other forms of inflammatory and febrile disease, than when in a less plethoric condition. This very spring I have lost one fine and favorite cow, a few days after calving, and undoubtedly from this cause. Sows, I am aware, are not so liable to fevers and similar complaints at the period of parturition, as cows are; but still I cannot rid myself of the idea that even a sow will pass through that process and its concomitants and consequences with far more safety, if only in fair or moderate condition, than if in such high condition as to be called pork-fat. In confirmation of this idea, I recollect of having met with a communication in the *Maine Farmer* of last year, in which a correspondent, who had had thirty years' successful experience in raising pigs, directs that for two days after bringing forth her young, a sow should have no food, except a little thin, warm gruel, so as not to exceed half a pint a day of meal. "This is very essential," says this breeder of thirty years' experience, "as it helps the flow of milk, and prevents fever." This shows that, though there may be less danger from full feeding and a high condition in sows than in cows, at and after the period of parturition, there is, nevertheless, danger to a certain extent. In Dr. Dadd's American Cattle Doctor, I find, also, a sentence which implies that sows, while with pig, should not be fed to the full, or so abundantly or richly as to make them pork-fat. The sentence referred to, directs that "sows with pigs should be kept with the litters in separate sties, and be still better fed than those with pig." With these remarks by way of caution against carrying a very good practice to an extreme, I leave the reader to judge and choose for himself between Mr. S.'s practice of keeping his breeding sow pork-fat, and what seems to me the safer, and every way better practice of keeping her in only fair, or moderate condition until after parturition. While her litter is nursing, it is safe, and without danger to health, to give the sow all the food she will eat up clean. I cannot, however, allow myself to dismiss this subject, without remarking that, though there may be one here and there who may go to an extreme in keeping his breeding sow too fat, there are scores for every such one who do not keep their breeding sows in as good condition as would be for her comfort and for their own profit.

Another peculiarity of this model hog-breeder and pork-maker, Mr. SKAATS, is this—he never feeds the pigs with the sow. He begins to feed them new milk, and then milk diluted with slops, just as soon as they will eat, which they will usually do at two or three weeks old, and in order that the sow may not steal it away from them, nor disturb them, he gives the pigs an apartment for themselves, with small openings to go in and out at their pleasure.

Another peculiarity of Mr. S.'s mode of raising and fattening hogs, consists in never allowing them to get so hungry as to squeal. When young, after weaning them, he feeds them six times a day, and at no after period of their growth, does he feed them less than four times a day, and he is very particular about having them fed at regular periods, punctually, and exactly at the hour. Then, again, he either cooks all their food, or lets it sour a little in the swill-barrel, if fed out without cooking. As an instance of the better relish given to raw food when it has lain forty-eight hours or so in the swill-barrel, it is stated that hogs will eat with apparent good relish, sour apples that have been thus treated, when they would not touch a fresh one.

Another of the peculiarities of Mr. S.'s mode of fattening his hogs is this—he uses very little corn, and sometimes none at all. In this respect, his example seems worthy of consideration, and perhaps of imitation, for, as must have occurred to the observation and reflections of farmers of good judgment, there are a good many who depend too exclusively on corn; who feed corn for weeks and even months at a stretch, causing dyspepsia, sourness of stomach, discomfort, and dis-

ease in their hogs, which might have been avoided by less heating food, as boiled potatoes, or other roots and vegetables with a little bran, shorts, ground oats, peas, barley, &c., mixed therewith. Such a mode of feeding is not only more wholesome, and more promotive of growth, but, also, decidedly more economical.

Another good point in Mr. S.'s mode of management is, he never keeps any spring pigs over winter, or any pigs whatever over a year old, except breeding sows. He aims to have two litters every year; the first he butchers at ten months old, if not earlier, and the second litter, coming in the fall, he disposes of as roasters and in other ways.

And now, what is the result of all this superior good management? It is this:—Mr. S. makes his pigs, at ten months old, dress over four hundred pounds, (400 lbs.,) this weight being about his average aim and attainment. He has sometimes exceeded even that large average, some of his hogs, at ten, or ten and a half months, weighing, when dressed, 450 pounds. This remarkable success, and the hope of enabling others to come somewhat near it, have induced me to write out the above statement of his mode of management.

MORE ANON.

For the New England Farmer.

MR. KIDDER AND HIS HIVE.

In a communication published in the *Farmer*, May 18, I incidentally alluded to Mr. Kidder's hive and book. I see by your paper of the 15th that Mr. Kidder does not seem pleased with what I said, and endeavors to turn aside my remarks by insinuating that I am interested in the sale of the Langstroth hive. Mr. Kidder is mistaken. I am not interested in the sale of any hive, whether patented or otherwise. My sole object in speaking of his hive, was to caution the public against what I had good reason to believe was an imposition. Mr. Kidder says in his book, page 147, that he is "well aware that the public have been swindled out of much money by highly extolled patent hives." This is just what I meant to convey when I spoke of his hive. Believing it to be a swindle, and knowing that the best part of it was purloined from the Langstroth hive, I did not hesitate to speak of it as is deserved. Mr. Kidder's denial of my statement is a matter of no consequence. Any one who will take the trouble to compare the two hives, will see that I have done him no more than justice. His book is, if anything, worse. It is a complete system of wholesale plunder from well known authors. The engravings are transfered from Langstroth's book, and whole pages are copied from Bevan without credit or acknowledgment. Occasionally traces of Mr. Kidder's marvellous intellect may be found scattered throogh the book. On page 99 he states that a good swarm of bees will store up 300 pounds of honey, and build their own comb, in one season. He had a swarm that stored up 125 pounds in eleven days, and there were three days of bad weather in the time. It was a young swarm that came out on the 14th of July. 300 pounds honey at 20 cts. a pound—net proceeds per swarm, $60,00! Can any sensible bee-keeper read this statement without coming to the conclusion that Mr. Kidder is blessed with a large share of invention and a happy faculty of steering clear of the truth! Perhaps Mr. Kidder ought not to be blamed for all the faults the book contains—as the gentleman who wrote it for him knew nothing of the natural habits of the bee, and made use of such material as came in his way. Mr. Kidder thinks that I "may be tickled with a communication from Mr. Quinby, published in the *Rural New-Yorker* of Dec. 18, 1858, wherein he says, 'that he had a large number of the Langstroth hives in use, and two-thirds of the swarms that were put into the hives built their combs in every possible direction, without any regard to the frames, making them, so far as movable combs were concerned, no better than a common hive.' He also adds, 'that the frames were worse than useless, and that parties that had purchased the Langstroth hive, had lost both time and money,' and at the same time recommends the use of the common hives in their stead."

If this quotation proves anything, it proves that the Kidder hive is utterly worthless; both hives have moveable comb, and the device for obtaining straight comb is the same in each. Mr. Kidder having taken his from Mr. Langstroth, I confess that I am pleased with the quotation, and will proceed to acknowledge my gratitude by an extract from the last edition of Mr. Quinby's book published in 1858. As this is Mr. Quinby's authorized work, I take it that the public have quite as good a right to consider it authority as any newspaper article certified by Mr. Kidder.

Mr. Quinby says, page 377, after speaking highly of the Langstroth hive,

"That in the summer of 1857, he put nearly one hundred swarms of bees into these hives, and although several made their combs somewhat crooked, they all could be taken out but one. That season proved a very poor one for honey, and to prevent a worse evil they were doomed to the brimstone pit. All the combs in these frames were saved, as so much work accomplished for another year. Such as contained enough honey to make it worth the trouble, were given to light colonies, a number of which were by this means enabled to pass the winter safely. For this season, (1858,) these frames with dry combs were used with empty ones in most of the hives for new swarms. Two or three frames only, containing combs, were put in a hive, as an occasional guide between the empty ones. In this way, I have secured all straight comb."

From the above it will be seen that Mr. Quinby ended the season of 1858 with all straight combs. Mr. Kidder's quotation proves that his own hive is a failure. While my quotation proves that Mr. Kidder's pretended quotation is a humbug. I hope Mr. Kidder will give me credit for helping him out of the dilemma. I have no prejudice for or against Mr. Kidder. I know him principally through his book, his hive, and a notice in the papers, that he had appeared in sundry places with a swarm of bees in his hat. After a careful study of his hive and book, I saw no reason why an ordinary-sized hat upon his head, should not leave room for a fair swarm of bees—and in the absence of anything better, I did not feel disposed to call in question his taste in thus filling the vacancy.

The following statements, one from Mr. Cros-

by, the able Solicitor of Patents, and the other from M. M. Tidd, the well-known Artist and Designer, are to the point, and there can be no doubt that those who use the Kidder hive are liable to a prosecution for an infringement of the Langstroth patent. E. A. Brackett.

Winchester, June 17, 1861.

June 19, 1861.

Dear Sir:—In reply to your inquiries I have to inform you that I have examined the hive commonly known as "Kidder's."

In my opinion it is a plain infringement on Langstroth's patent of Oct. 5, 1852.

It is true that there are some variations from the exact construction recommended by Langstroth, but the changes do not evade the patent, and are anything but improvements upon it.

Parties using, selling or making the Kidder Hive may be proceeded against for infringement of the Langstroth patent, and I have no doubt but that damages would be recovered for the infringement. Yours respectfully,

J. B. Crosby, 70 *State St.*

E. A. Brackett, Esq.

Boston, June 19, 1861.

Dear Sir:—I have carefully examined the copy of Mr. Kidder's book that you sent me, and I am fully satisfied that with the exception of the portrait of Mr. K. and the little hive on page fifteen, the cuts are taken from Mr. Langstroth's book by that somewhat piratical process known to engravers as "transfer." I feel confident of this, as it is hardly possible that I should mistake a transfer from my own drawings anywhere.

Respectfully yours,

E. A. Brackett, Esq. M. M. Tidd.

For the New England Farmer.

SKILL IN FARMING.

Mr. Editor:—Skill, in its common acceptation, means science or knowledge; and perhaps it includes, in its signification, the idea of art. In this popular sense, I apply the term skill to farming. Skill in farming is no less essential to success than skill in any other business or pursuit. It is as important and as necessary to the success of a farmer, as it is to the success of an artist, a mechanic, a manufacturer, a merchant, a lawyer, a doctor, or a divine. There is no such thing as success in any calling or pursuit without skill. Every thing depends upon it. And, in general, the degree of sucesss is in due proportion to the amount of skill, in each particular case, as well as in each particular calling.

The farmer is no exception to this general rule or principle. He is generally successful or unsuccessful in exact proportion as he manages his business skilfully or unskilfully; so that, whatever may be said about good or bad luck, in particular instances, it is skill that leads to success in all kinds of business. There can be no doubt of this truth, as a general principle. There can be no doubt, that skill, activity, industry and economy usually carry off the prizes which turn up on the wheel of fortune. At the same time, it is undoubtedly true, that something is due to the circumstances of life, as well as to the influence which wisely controls human destiny. But all who expect to be successful in farming, or in any other kind of business, without the exercise of skill, prudence and economy, will most certainly meet with sad disappointment.

This I know is doubted by some, and denied by others. "How comes it to pass," say they, "that such men as the late Lord Timothy Dexter, of Newburyport, without skill or even common sagacity, have been able to accumulate such monstrous fortunes? Besides, there have been men who did not know enough to go to mill, without a large stone in the mouth of the bag to balance the grain in the other end; and yet these men, by mere good luck, have blundered into great fortunes."

It is true, that the late Lord Timothy Dexter, as he was familiarly called, sent a large cargo of warming-pans to the West Indies, a region already too warm for human comfort, on which cargo he would have *lost* instead of *making* a fortune, had it not been for the skill and ingenuity of a Yankee, to whom the cargo was consigned, who converted the top part of the warming-pans into strainers of molasses, and the bottom part into dippers or ladles, and sold them at enormous prices; so that the blunder of Lord Dexter was, by the skill of the Yankee, converted into a very profitable investment. The same may be the case with regard to the blunders of an unskilful farmer, if he happen to have an agent sufficiently skilful to turn all his blunders to good account, so as to accumulate a fortune.

But, after all, it is skill that accomplishes the object. It is skill that makes the successful and profitable farmer. It is skill in practice—in the expenditure of money, time and labor. It is that kind of skill which enables a farmer to do every kind of work at the right time, and in the best manner possible.

The number of farmers is comparatively small who employ all their means and resources to the best advantage. They have, perhaps, money enough, time enough, and a certain kind and order of talent enough; but, for want of skill and a suitable education in their calling, they fail of success. They know that they must plow their grounds, work in their manure if they have any, sow and plant their seeds, and cultivate their crops, some time in the spring; but the exact time when they should perform these several operations, they know not. The same is true with regard to the best way and manner of doing the work. In plowing, they are liable to do it a little too early or a little too late, a little too deep or not quite deep enough. The same is true with regard to all the operations on the farm. They all suffer for want of skill in the operators.

Skill in farming depends, in a great measure, upon thought, study, observation and practice. There is mind in the work, and a will to work. And such farming is always successful, and generally profitable. It is successful, because all the operations of the farm are directed by skill, and performed in the best manner possible. For the same reason, it is generally profitable, and either results in great crops, or else in great improvements on the farm. It may be the object of a skilful farmer not to obtain a great and valuable crop the present year, but to make some lasting and valuable improvement on his land. And such

farming is generally profitable in the long run; because, with very little additional labor and expense, every subsequent year, the land may be made to yield very great and profitable crops.

Indeed, skill is absolutely indispensable in all farm operations; skill in buying and selling; skill in saving everything, and in converting it to some useful purpose; skill in making, saving and applying manures; skill in plowing the land, in pulverizing the soil, and in fitting it for the reception of the different kinds of seed; skill in the selection of seeds, and in adapting them to the different kinds of soil; skill in cultivating the different kinds of crops and of garden vegetables, and in turning them to good account; skill in breeding, rearing and managing the various kinds of farm stock, so as to render them useful and profitable; in fine, skill in everything.

JOHN GOLDSBURY.

Warwick, March, 1861.

RAIN.

COUNTRY.

The rain-drops now fall gladly all around,
And light with sweet repose upon the ground:
Each leaf and flower, each tiny blade of grass,
Rejoices that the rain has come at last!
How welcome to the farmer, as now he lays aside
His work—and then at close of eventide
Gives thanks unto the Sender of the rain
For giving all this blessing once again!

CITY.

Upon the cold, damp pavement, hear it patter!
The people now are in a wondrous clatter;
The gutters by the side-walks like little rivers seem,
As falling drops of rain in the last sunlight gleam;
How thankful is the country!—as for the city, never;
Its people cannot stop to praise our God, the giver;
For 'tis very inconvenient thus to have it rain,
And be upon the street with such a lengthy train.

For the New England Farmer.

FARMING, OR A LOVE FOR THE PROFESSION NECESSARY TO SUCCESS.

"If you would succeed in business, you must be in love with your profession."

Perhaps some of the more sensitive and would-be-refined will object to applying the above maxim to the profession of agriculture; and no doubt such will say, "It might very appropriately be applied to some of the more popular or literary professions; but to apply it to the lower order of professions verges almost on the vulgar.

I, however, shall object to such a verdict, and hope and trust to convince those who have looked down upon us, that husbandry is not a low pursuit, but an honorable, high-toned and profitable profession; and when carried out to the letter, sure to return happy results. But to be successful, you must be in love with the profession.

You may ask how? In what manner? Well, in the first place, you must love to work; love the farm, and all connected therewith, both in regard to profit and pleasure; and take a deep interest in the full development of all its parts. The shrewd, calculating farmer will not do his work "by the halves;" he does it in such a way that he will secure the whole crop.

He loves to see his fields well manured, well plowed, well harrowed and thoroughly pulverized. He will now take great pains to get the best variety of seed, and put it in the ground in a thorough and judicious manner. He will then not only love to, but most assuredly will have the pleasure of seeing the young blades look thrifty, and finally, of gathering a bountiful harvest.

He will love to watch the tender plants, and nourish and protect them from noxious weeds or deadly vermin; and will hail with joy the first opening bud or blossom. His interest, care and protection extends equally to the most delicate garden plant, struggling for life between weeds and weather—the tender blade of corn, pointing heavenward, for the sun's genial rays, as well as the sturdy potato, and other hardy plants, which almost defy wind or weather. The farmer is the faithful guardian of all; and he will watch over all with a jealous eye, if he love his profession. He loves to contemplate his growing crops, as one leaf after another is put forth, until at length, the full ear is formed, and all is well stored in his ample barns.

A model farmer will have his fields, as well as pastures, suitably divided. He not only has a system of rotation of crops, but of fields and pastures, as well; each being used alternately. And if his fancy leads him that way, he will form beautiful and picturesque scenery, and at the same time make it a source of profit, by planting fruit, and other valuable trees and shrubs, around his fields, as well as by the roadside and around his dwelling; and especially will he take great pride in making everything around his home wear a cheerful look. He will have the choicest of fruits and flowers in his garden, the grounds of which will be both ample and tastefully arranged.

Nor do I overstep the bounds of propriety or probability, if I say, he loves to see his wife or daughters engaged with interest in the flower garden; he loves to see them and the roses blooming together; he loves to see everything enjoying life, happiness and prosperity.

And when at length his fields are "white unto the harvest," when his choice fruit trees are bending their branches with a precious burden, and the "golden harvest" of bright, long, yellow ears of corn, and the more modest pumpkin, meet his eye, what a source of pleasure is here! With what a joyous heart, and with what renewed energy does he ply his skill, until all is secure; and with what gratitude and thanksgiving does he raise his thoughts to the Giver of all good!

His crops all secure, the faithful farmer, true to his calling, loses no time, but again speeds his plow, and prepares for another year. There are stone to dig, ditches and drains to make, land to clear, and other improvements to make; all in their turn, and each in its most appropriate season. And for all this multifarious business, the farmer finds ample time; for his whole heart is in it, and his plans are well laid. He finds what many are seeking after in vain—because they do not seek aright—employment; which begets health, wealth and contentment; and these beget happiness. The secret of all is, "love for the profession;" "love of employment."

And when at length the snows of winter begin to fall, and cold, wintry winds howl around his dwelling, the faithful farmer has the satisfaction

of knowing that all around him are comfortable; he loves to retire at night, with the happy consolation that nothing dependent on him suffers from cold or hunger.

The farmer not only takes pride in raising good crops, but he also takes pride in raising good stock, which he finds both a source of enjoyment and profit. He loves to feed them, litter and keep them clean and comfortable. In a word, he is interested in their welfare; for what is for their good, is for his benefit. He loves to have them hearty, and to this end gives them a change of food. He loves to see them look sleek, and he knows the "card and curry," with good feed, will do it. But above all, he loves to have the name of having the best stock of cattle and horses in town; and occasionally have some well known Boston cattle-dealer compliment him with "a bigger pile of 'rocks,' than he had paid any body else," for his best fat oxen.

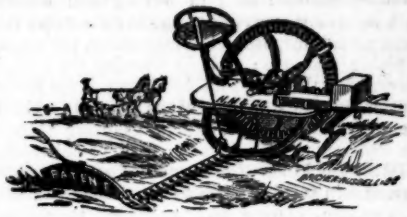
Another pastime our hero of a farmer loves dearly; that is, to sit the long winter evenings with his "gude wife," lovely daughters and promising boys around him; and all enjoying the good of their labor. T. P. Bailey.

Newbury, Vt., 1861.

MOWING MACHINES.

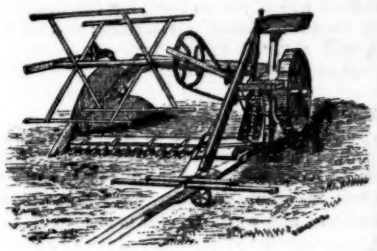
We have frequent inquiries, made both by letter and verbally, in regard to the operation of these machines, and though we have, at various times, published descriptions of the principal ones now in use in New England, we will, to answer these inquiries once for all, give once more the method of construction and operation of the four machines most in use here, referring our readers who are interested in the subject, to the advertisements and circulars of the parties by whom these machines are sold, for such minute particulars, and such recommendations as would be out of place in this article. As to the question,—*Which is the best Mower?*—it is one we are unable to answer. One machine would satisfy the wants of one farmer, while it would operate unsatisfactorily in the hands of another, and we know persons who are equally good farmers, who prefer respectively, the Manny, the Wood, the Ketchum, the Buckeye, the Allen, or some other machine, over all others. Much depends on use, and a man who has accustomed himself to the working of one machine, would with difficulty adopt one of different construction. Each farmer should decide for himself, from observation, or from the recommendations of those whom he considers competent to judge. But we think no one, from a single trial, or from any thing less than an entire season's use, can be able to decide that any machine will answer all a farmer's requirements.

The Ketchum Machine has, we believe, been longer in the market than any other in New England, and has undergone various modifications and improvements. As at present constructed, the machine, except the poles or shafts, is made entirely of iron, weighs only 450 to 480 pounds, cuts a swath 3½ to 4½ feet in width, and sells for



$70,00 to $85,00. The inner side of the driving wheel, towards the machine, is supplied with cogs, which operate upon a small cog wheel at the side of the pole, and at the height of the axle of the large wheel from the ground. By a connection through other gearing arranged very compactly between the pole and the driving wheel, and in front of the shaft of the latter, motion is communicated to the cutter bar, which hangs off to the right of the machine, and which is supported at the heel by a small wheel. The cutter bar is directly in a line with the shaft or axle of the driving wheel, so that when the latter rises or falls, in going over any irregularities in the ground, the knives rise or fall at the same instant. By means of levers, easily operated by the driver in his seat, the machine can be instantly thrown out of, or into gear, or the knives can be raised to pass over any obstruction. The machine is light, durable, compact, and of moderate draught.

The Manny Machine is the next in age to the Ketchum, and like that, has been the subject of numerous improvements, some change in the minor details being made nearly every year. The machine runs upon one driving wheel, which supports the frame, and the shaft of which carries the machinery by which the cutter bar is operat-



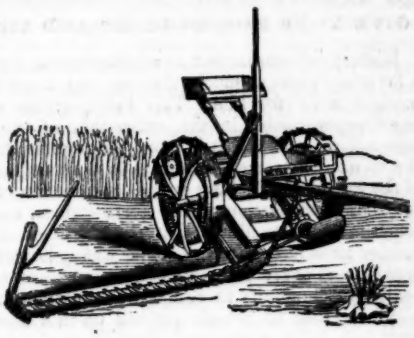
ed. A small wheel runs under the foot of the pole, which helps to support the weight, and adds steadiness to the machine, and the outer end of the finger bar is supported by another small wheel. The machine is heavier than the Ketchum, weighing 650 pounds for the large two-horse machine. We do not know the price. One peculiarity of

this machine is the reel, which presses the grass against the cutter bar, and causes it to fall behind it when cut, an advantage in operating on hillsides, or in going in the direction of the wind. A reaper attachment goes with this machine. We have not the means at hand for a fuller description of the Manny. It is a machine which has given great satisfaction to New England farmers, and hundreds of them are in use in these States.

THE BUCKEYE MOWER was introduced into New England in 1857. The machine is heavy, cuts a swath from 3½ to 4½ ft. in width, and sells for $85 to $120. It runs upon two driving wheels, either one of which, when in motion, will operate the knives, so that a sharp corner can be turned without stopping the working of the machine. Motion is communicated to the knives by a bevel wheel upon the shaft of the driving wheel, which carries the shaft of a cog-wheel placed at the back of the frame, and revolving in a direction at right angles with the line of motion, and which in its turn communicates motion by means of a pinion to a shaft passing under the axle of the driving wheels, to the forward end of which the cutter bar is attached. A small wheel supports the heel of the finger-bar, which, by means of a double hinge joint, rises or falls, to accommodate itself to ir-

regularities in the surface of the ground, independently of the position of the driving wheels. When the machine is not in use, the finger-bar can be folded up so as to lay across the frame in front of the driver's seat. By means of a lever, which can easily be operated by the driver, the finger-bar is raised to any desired height, to pass obstructions. The machine is of light draught, and well made.

THE WOOD MOWER was introduced here two years ago. It is a small and light machine, weighs from 450 to 514 pounds, and costs $70,00 to $80,00, cutting a swath 3½ to 4 feet in width. It resembles the Buckeye in having two driving wheels, but in other respects, is essentially different. About 4 inches inside of the rim of each driving wheel is an inner wheel, the inner circumference of which is furnished with cogs, revol-



ving a shaft parallel to the axle, and raised higher from the ground. Upon this shaft, under the driver's seat is a bevel wheel, which communicates motion to a shaft at right angles with the axle, and to the forward end of which the cutter bar is connected by means of a crank pin attached to a balance wheel. The finger-bar is raised by means of a lever in front of the driver's seat, and the machine can be thrown out of gear by raising pawls which confine the pinions on each end of the driving shaft. The attachment of the cutter-bar to the machine, is such that in striking any obstruction it relieves itself, and the finger-bar will thus pass over obstacles six inches high, without stopping the machine, or interfering with its operations. By removing one bolt, at the heel of the finger-bar, that portion of the machine can be detached, and laid across the frame for transportation. A reaping and self-raking attachment goes with the machine. The Wood mower is a light machine, of easy draught, and made in the best manner, so that its durability or efficiency is not affected by its light weight. Three sets of knives are supplied with this machine, and two with each of the others. In both the latter machines, the knives do not vibrate when the machine is backed, only the forward motion of the driving wheels, or of one of them, if the other is stationary, as in turning a short corner, communicating motion to the cutter-bar.

The machines to which we have thus alluded, are not the only ones in the market, but they are the ones about which we receive the most inquiries, and which are the best known in this neighborhood.

The Ketchum is made and sold by Nourse, Mason & Co., of this city; the Manny is made and sold by Alzirus Brown, of Worcester; the Buckeye is made by John P. Adriance, of Worcester, and sold in this city by Parker, Gannett & Os-

good; the Wood is made by Walter A. Wood, Hoosick Falls, N. Y., and sold in this city by Nourse & Co. Any inquiries about either of these machines can be addressed to these parties respectively.

GIVE YOUR HORSES LIGHT AND AIR.

History informs us that a certain emperor loved a favorite horse so much that he had a golden manger made for him. This extravagance appears unpardonable in the estimation of many, now-a-days, and yet it is more pardonable than the opposite extreme—meanness in the treatment of the horse. In looking at the construction of a very large proportion of our horse-stables, I am sometimes led to think that the object of the builder must have been to see how widely he could depart from every principle of humanity and expediency—humanity in compelling a patient and faithful animal to remain penned up in a close, dark and filthy apartment—expediency in thus sacrificing not only the comfort, but the health, and consequently the usefulness and value of the animal.

Light is indispensable to the plant and to the man,—is it less so to the horse? If it is, why? When the tyrants of the old countries sought to inflict their most fearful punishments, next to death, confinement in a dark cell was considered the most severe. Is it reasonable that the horse —whose native home is in the desert and wilderness, where there is nothing to obstruct the free light of heaven—is it reasonable, I ask, that he should not suffer from confinement in our generally dark and gloomy stables? Is it not a shame, in a land like ours, where glass enough for a moderate sized window can be had for fifty cents, that a valuable horse should be shut up day after day in a dark stall or stable? Let every horse owner's heart, if he has one, answer!

Is foul air wholesome for plants? Certainly not. Is it wholesome for men? Most emphatically, no! If not wholesome for plants or men, can it be for horses? The answer is as emphatically, *no!*

Why then are the majority of our stables constructed without the slightest regard to that most important feature, ventilation? In thousands of cases, an animal, than which none other loves the fresh air better, is doomed to confinement for days and nights at a time, in a stable, the atmosphere of which is so foul that a man would die in it. How many of the diseases to which our horses are subject, may be traced to this unpardonable error? I say unpardonable, for no man possessed of either common sense or common humanity would thus punish one of his best and most faithful friends—the horse.

A word in conclusion. Farmers! if you would have healthy, lively, serviceable horses, give them plenty of light. God will supply it, if you will only furnish the means whereby it can be made to reach your stables.

Look to the ventilation of your stables, if you would not have prematurely old and worn out horses. Depend upon it, plenty of light, and plenty of fresh air in your stables, will save you many a dollar in the course of a life-time.—*Cor. Farmer and Gardener.*

For the New England Farmer.

A WASH FOR WALLS AND ROOFS OF BUILDINGS.

I noticed in your issue of June 1, 1861, a statement in regard to a wash for the walls and roofs of buildings, said to render them incombustible, and much more durable. Through your kindness, Mr. Editor, or some of your correspondents, I should like to know to what an extent, and how long it has been tried, and its merits proved. The cost does not appear to be great, and if it is really what it is recommended to be, it would probably be used to some extent, in place of oil paint; but if otherwise, it would not be policy to use it, excepting in cases where common whitewash would be used.

A cheap and durable wash or paint for buildings, especially among farmers, is an object much to be desired, and your paper seems to be the medium for making all useful hints known to the public. I would also inquire,

1. Whether this wash should be applied cold or warm, and could not a common whitewash brush be used?

2. Could a light coat of oil paint be laid over a surface covered with it, and would it add to its durability to do so?

3. Does it make any difference in regard to the coloring matter used, whether white lead or zinc, or the darker paints in common use? and, of course, I suppose it would last longer on unplaned work, than that which had been planed. Please give the necessary information as soon as convenient, and oblige, M. A. THOMPSON.

Swanzey, N. H., June 15, 1861.

REMARKS.—The "wash" spoken of above was suggested to us by a gentleman who gives much attention to such things, and who speaks of it with certainty. We intend to make and use it, as it strongly commended itself by the use of the ingredients that go to make it up. We hope the gentleman who communicated the matter to us, or any other person acquainted with it, will speak of it.

THE BAMBOO.

This plant may well be called useful, for it is applied by the Chinese to such a vast variety of purposes, (some of them indeed better accomplished elsewhere by different materials,) that it may justly be called their national plant. It is reared from shoots and suckers, but after it has once rooted, is not much attended to. The common yellow species extends over all the southern and eastern provinces, but the varieties mentioned by Chinese writers amount to sixty, of which the black-skinned sort, used in making furniture, and the low, fine-branched one, affording the slender twigs employed in the manufacture of writing pencils, are the best known. The tender shoots are cultivated for food, and are, when four or five inches high, boiled, pickled and comfited; but not "the tender buds and flowers, cut like asparagus," as represented by Murray. The roots are carved into fantastic images of men, birds, monkeys, or monstrous perversions of animated nature, cut into lantern-handles and

canes, or turned into oval sticks for worshippers, to divine whether the gods will hear or refuse their petitions. The tapering culms are used for all purposes that poles can be applied to in carrying, supporting, propelling and measuring, by the porter, the carpenter and the boatman; for the joists of houses and the ribs of sails, the shafts of spears and the wattles of hurdles, the tubes of aqueducts, and the handles and ribs of umbrellas and fans.

The leaves are sewed upon cords to make rain cloaks, swept into heaps to form manure, and matted into thatches to cover houses. Cut into splints and slivers of various sizes, the wood is worked into baskets and trays of every form and fancy, twisted into cables, plaited into awnings, and woven into mats for scenery of the theatre, the roofs of boats and the casing of goods. The shavings, even, are picked into oakum, and mixed with those of rattan, to be stuffed into mattresses. The bamboo furnishes the bed for sleeping and the couch for reclining; the chopsticks for eating, the pipe for smoking and the flute for entertaining; a curtain to hang before the door and a broom to sweep around it; together with screens, stools, stands and sofas for various uses of convenience and luxury in the house. The mattress to lie upon, the chair to sit upon, the table to dine from, food to eat, and fuel to cook it with, are alike derived from it; the ferule to govern the scholar, and the book he studies, both originate here. The tapering barrels of the *sang*, or organ, and the dreaded instrument of the lictor, one to make harmony, and the other to strike dread; the skewer to pin the hair, and the hat to screen the head; the paper to write on, the pencil handle to write with, and the cup to hold the pencils; the rule to measure lengths, the cup to guage quantities, and the bucket to draw water; the bellows to blow the fire, and the bottle to retain the match; the bird-cage and crab-net, the fish-pole and sumpitan, the water-wheel and eave-duct; wheel-barrow and hand-cart, etc., are one and all furnished or completed by this magnificent grass, whose graceful beauty when growing is comparable to its varied usefulness when cut down.—*Rev. R. S. Maclay.*

How to Raise Pork.—The reader will find an interesting and instructive article in another column from our intelligent correspondent, "More Anon," upon the subject of *rearing and fattening* hogs; a subject which demands more attention than it has heretofore received from farmers. Hogs may be kept profitably or unprofitably, according to the manner in which they are managed. A farmer once inquired of us what the price of pork was at that time, stating that he had some twenty hogs to sell. "How old are they?" said we. "Fifteen months, eighteen months to two years." "What will they weigh?" "All the way from two to three hundred!" We slaughtered swine last fall, made from pigs that weighed less than 36 pounds each, *eleven* months before, and the hogs weighed, when handsomely dressed, from *four hundred and fifty to four hundred and seventy-five* pounds each!

As we have stated before, we do not *work our hogs*, either in harness or on the manure heaps. When they have taken their meals and what exercise they please, they retire to a dry, roomy bed, lie down and grow, and make a business of it. An Irishman can overhaul the manure heap much cheaper than the hogs can.

CHEMISTRY FOR THE MILLION.

"Chemistry made easy" and applied to all useful purposes, is our object in these articles. We have given somewhat protracted accounts of *oxygen* as one of the most abundant and important elements of matter. If we were to enlarge as much on each of the other fourteen elements, of which, in combination with oxygen and with each other, nearly all known bodies are composed, it would take too long, and the reader would despair of coming to any practical application of these things to the necessities and conveniences of life. We therefore give below a very brief description, little more than a definition, of the other fourteen, requesting that the reader will review what we have said of oxygen, and form as definite an idea as he can from so short a description of the following:

Chlorine.—A yellowish green gas, twice and a half heavier than air; exists largely in sea water; constitutes more than half of common salt; enters slightly into all soils, and is essential to their fertility. The most economical way in which a soil deficient of it can be supplied, is in the form of cheap agricultural salt, such, for instance, as comes from fish barrels, or has been damaged by shipping, and is worth little or nothing for other purposes.

Sulphur.—A yellow, solid substance, insoluble in water, pretty generally known as roll brimstone; flour of sulphur, a fine yellow powder, or the milk of sulphur (*lac sulphuris,*) a still finer powder, nearly white. Sulphur exists in all soils—constitutes a portion of guano, superphosphate of lime, of animal manures and of fertilizers generally. If we were to analyze 86 pounds of ground plaster, we should find it to consist of precisely 32 pounds oxygen, 20 pounds lime, 16 pounds sulphur and 18 pounds water. Derived from the soil and fertilizers, sulphur passes through the food into the animal economy, forming a part of the tendons, skin, horn, hoof, and especially of hair and wool.

Phosphorus.—A yellowish substance, of about the hardness of bees' wax, existing in all good soils, essential to the growth of the cereals, grasses, and most other crops. Is supplied to the soil originally from the decomposition of the rocks. Re-supplied to soils exhausted of it in the form of guano, superphosphates and barn manures. Passes from the soils to the crops, and thence to animals, making up a large part of the bones and a considerable portion of the muscles, blood, and some other parts.

Carbon.—Charcoal is carbon, mixed with a little soot and ash. Diamond is pure carbon. Plumbago, wrongly called black lead, as used in our pencils, is a less pure form of carbon. Strange as it may seem to our young readers, diamond, charcoal and plumbago, are one and the same

thing, except that in the last two there is an intermixture almost too small to mention, of other ingredients.

Silicon.—This is the basis of sand, flint and quartz rock. It is a brownish powder, a little resembling the paint called Spanish brown; is very abundant in nature, constituting probably nearly one-fifth of the entire globe.

Nitrogen.—A colorless gas. About four-fifths of the air is nitrogen. The remaining fifth is mostly oxygen. It constitutes a part of all plants and animals; is supplied to the soil in the form of ammonia and the nitrates, as they exist in guano, animal manures, vegetable fertilizers, green crops plowed in, &c.—*American Farmers' Magazine.*

THE BARK-LOUSE.

Noticing that considerable attention is now given to this insect, we have read with interest a long article on the subject, published in the Canadian *Agriculturist.* The writer says:

"The insect appears as a small scale, adhering firmly to the bark of the tree, not larger than a timothy seed, of the color of buckwheat, and, if examined in the spring, will be found exactly under that scale, a miniature muscle-shell, filled with round white eggs, which can be easily separated and counted to the number of forty or fifty; by June, these are hatched out, and, if watched, appear as nimble, small, white insects, capable of quick movements, and the next change the observer finds is that all over the bark new whitish red blotches or dots are seen, which, if examined, prove to be the new insect in its shell, the product of one of those white eggs, found in the old scale, the outward covering of the female insect, which, authorities say, after certain changes fixes itself to the tree, deposits its eggs, dies, and leaves its shell as the abode of its young, which, like the parent, in due time quit that shelter to go through the changes peculiar to insect life, to be a torment and a perpetual annoyance in the unceasing round of insect transformations.

"Without microscopical observations it is impossible accurately to describe the way the insect feeds on the tree. The damage done is readily seen, but how the whole twig and limb become diseased by the mere outward puncturing is strange. You break—and it breaks too easily—a twig, and all through it is brown and evidently unhealthy. The part swells, and the bark grows corrugated and tumefied, the branch loses the clean, healthy appearance that it ought to have, and all this from the operation of a small minute scale, only stuck, as it were, to the bark. Evidently the circulation is impeded, and a process of decay has commenced."

The writer regards this parasite about as fatal to the apple tree as the midge is to wheat, and as one that cannot be avoided. He has worked hard to exterminate it, but in spite of all his efforts the disease is increasing among a portion of his trees. Of his own labors and of the remedies tried he thus speaks:

"When I begun to plant an orchard some ten years ago, I had no difficulty with my trees, they throve like willows; but an addition I made some years after never prospered nigh so well, taking many times the attention the first got, all from the parasite increasing in abundance; still I never gave in. I dug and delved, I manured and dressed, kept away weeds, and permitted nothing but root crops to grow amongst them, and that even seldom; I scraped and diligently washed both limb and twig, nay I may say truly, painted with all the washes recommended, tobacco juice, soft soap, bleacher's soda, but in vain; I could not exterminate, only keep under, in a sort of a way, the numerous insects. Latterly I abandoned that wash, and have only used bleacher's soda, calcined sal soda, diluted with lime water, yet they beat me, and this spring you may conceive how diligent I must have been, when with my own hands, I washed away 20 lbs. of that soda, and now at this present moment many of the branches are as black as any hat, home-made or imported."

Mr. Cole recommends, in his fruit book, one part of soft soap with four of water, and a little fresh slaked lime; or a solution of one pound of potash to two gallons of water. Apply about the first of June. A lye of wood ashes is good.

To be of service these applications must be made with brush or swab to the insects on every branch and twig; a task practically impossible in case of large trees.

VISITING IN A MEXICAN HACIENDA.

A little before dark we came to the hacienda of Santa Rosita de Cocoyotla, another sugar plantation, which was to be our headquarters for some days to come. We presented our letter of introduction from the owner of the estate, and the two administradors received us with open arms. We were conducted into the strangers' sleeping-room, a long, barrack-like looking apartment, with stone walls and a stone floor that seemed refreshingly dark and cool. We could look out through its barred windows into the garden, where a rapid little stream of water running along the channel just outside, made a pleasant gurgling sound. Appearances were delusive, however, and it was only the change from the outside that made us feel the inside cool and pleasant. For days our clothes clung to us as if we had been drowned, and the pocket-handkerchiefs with which we mopped our faces, had to be hung on chair-backs to dry. Except in the early morning, there was no coolness in that sweltering place. In one corner of our room, I discovered a brown toad of monstrous size, squatting in great comfort on the damp flags. He was as big as a trussed chicken, and looked something like one in the twilight. We pointed him out to the administrador, who brought in two fierce watch-dogs, but the toad set up his back and spirted his acrid liquor, and the dogs could not be got to go near him. We stirred him up with a bamboo, and drove him into the garden, but he left his portrait painted in slime upon our floor.

Our beds were like those in general use in the tropics, where mattrasses would be unendurable, and even the pillows became a nuisance. The frame of the bed has a piece of coarse cloth stretched tightly over it; a sheet is laid upon

this, and another sheet covers the sleeper. This compromise between a bed and a hammock, answers the purpose better than any thing else, and admits of some circulation of air, especially when you have kicked off the sheet, and lie fully exposed to the air and the mosquitoes. I cannot say that it is pleasant to wake an hour or two after going to bed, with your exact profile depicted in a wet patch on the pillow; nor is it agreeable to become conscious at the same time of an intolerable itching, and to find, on lighting a candle, that an army of small ants are walking over you, and biting furiously. These were my experiences during my first night at Cocoyotla; and I finished the night, lying half-dressed on my bed, with the ends of my trousers-legs tied close with handkerchiefs to keep the creatures out.—*Anahuac, or Mexico and the Mexicans.*

IMPORTANCE OF WHOLSOME BEDS.

Sleep to the working man is emphatically Nature's sweet restorer, reinvigorating the physical system, which through much toil has become weary, and keeping up that flow of life and spirits which is necessary to the performance of the arduous duties of farm life. A comfortable bed, as we are all aware, conduces greatly to one's rest. On this subject, a recent writer says:

Of the eight pounds which a man eats and drinks in a day, it is thought that not less than five pounds leave his body through the skin. And of these five pounds a considerable per centage escapes during the night while he is in bed. The larger part of this is water, but in addition there is much effete and poisonous matter. This, being in great part gaseous in form, permeates every part of the bed. Thus all parts, mattress, blankets, as well as sheets, soon become foul, and need purification.

The mattress needs the renovation quite as much as sheets. To allow the sheets to be used without washing or changing, three or six months, would be regarded as bad housekeeping; but I insist if a thin sheet can absorb enough of the poisonous excretions of the body to make it unfit for use in a few days, a thick mattress, which can absorb and retain a thousand times as much of these poisonous excretions, needs to be purified as often as once in three months.

A sheet can be washed. A mattress cannot be renovated in this way. Indeed there is no other way of cleansing a mattress but by steaming it, or picking it to pieces, and thus in fragments exposing it to the direct rays of the sun. As these processes are scarcely practicable with any of the ordinary mattresses, I am decidedly of the opinion that the good old-fashioned straw bed, which can every three months be changed for fresh straw, and the tick be washed, is the sweetest and healthiest of beds.

If, in the winter season, the porousness of the straw bed makes it a little uncomfortable, spread over it a comforter, or two woolen blankets, which should be washed as often as every two weeks. With this arrangement, if you wash all the bed coverings as often as once in two or three weeks, you will have a delightful, healthy bed.

Now if you leave the bed to air, with open windows during the day, and not make it up for the night before evening, you will have added greatly to the sweetness of your rest, and in consequence to the tone of your health.

I heartily wish this good change could be everywhere introduced. Only those who have thus attended to this important matter can judge of its influence on the general health and spirits.

For the New England Farmer.

PROGRESS IN THE ART.

MESSRS. EDITORS:—Thinking you might like to hear occasionally from the readers of your paper, I am inclined to pen a few thoughts of my own, though I, by no means, pretend to be much acquainted with the world and its wants. I wish to chat awhile with the farmer, and I know of no better way than through the columns of the *Farmer*.

It is evident that implements for various kinds of labor are daily improving. In this respect, progress is everywhere visible. Probably no class of laborers are receiving, in this way, more assistance from the thoughts and experiments of scientific men, than agriculturists. Now what I wish to suggest is, that farmers and farmers' sons do not improve as they ought by this knowledge. They are willing to travel in the old beaten track of their fathers. They should not depend upon others for all improvements in agriculture; they should think for themselves; they should use their brains as well as their hands. Does some one ask, what improvements can they make in farming? Let us notice one or two, that all might make. At this season of the year, when every one should be busy in preparation for coming spring, even small improvements should not be despised. Much might be done to advantage in fitting teams for their severe labors, even when a good selection has been made. Great pains should be taken to train them aright, especially in walking, that they may do their part of the spring's work easily and quickly. Fast walkers are the fast horses for fast farmers. They save their owners much time, expense and strength. The first part of this assertion is so evident, that I will pass it by, and look only at the saving of strength.

Did it ever occur to the many readers of your paper, that the team which plows two acres per day, exerts itself but little, if any, more than the team which plows but one, provided the first is not forced beyond its usual pace. Experiments in plowing, harrowing, and in most kinds of farm work, prove this statement to be true. If this is so, what an amount of time and money is foolishly wasted, during the seed-time of the year, by many farmers. Why will not men keep good teams, and use them well? It is true, that many of our hill farms are so uneven, that it is impossible for a team to walk fast. I wish some New England farmer would procure the right instrument, and measure the power required to plow a smooth level piece of ground when moving at the rate of two, three and four miles per hour. Let us know the result in black and white. Let us see if we cannot make an economical improvement.

A FARMER'S SON.

Burlington, Vt., 1861.

For the New England Farmer.

MIND YOUR BUSINESS.

Mr. Editor:—This short sentence, mind your business, is very imperative and expressive. It is also very comprehensive in its application, and meaning. It applies equally to you, and to me, and to all mankind; and it says, to each and to all, as plain as language can say, mind your business. It has no respect for particular persons, or professions, or pursuits, nor will it allow any one to dodge the consequences of his own personal responsibility. Its significance will, perhaps, be better understood by a few illustrations of its application and meaning in the language of common, every-day life.

1. It is the language of all in lawful authority, who "say to this man, go, and he goeth; and to another, come, and he cometh; and to their servant, do this, and he doeth it." It applies as well to civil, as to military authority; and it requires attention to the word of command; otherwise, there would be no such thing as authority; but all would be in a state of anarchy and confusion.

2. It is the language of the master to his slaves. I do not intend to touch the merits of slavery, nor to consider the master's right to use this language; but, so long as slavery exists, his language to his slaves is, and must be, in the very nature of the case, do this—do that—do as I tell you—mind your business.

3. It is the language, not only of parental authority and family government, but of Divine authority, addressed to the young, and exhorting them to obedience. "Children, obey your parents in the Lord; for this is right." Mind your business.

4. It is the language of the wise and virtuous, addressed to "evil doers and intermeddling busybodies in other men's matters." Their language to such is, mind your business.

And why may it not be regarded, also, as the language of farmers, of friends, and of equals, mutually addressed to each other, and earnestly urging the importance of attention to business? Mind your business, brother farmers; if you have anything to do, attend to it, for it will not do to neglect it. Farming requires mind; it requires thought and reflection; it requires discrimination and good judgment; and it requires present personal attention. The mind must be engaged in the work. The head, the heart and the hands must co-operate and be united in the work. "Whatsoever your hands find to do, you must do it with all your might." You must work with a will and determination to accomplish your object. You must mind your business.

Many of those who complain that farming is unprofitable, are persons whose minds have never been earnestly engaged in the business. They have been trained up, perhaps, in some other kind of business, and through want of attention to it, and skill in the business, they have failed therein. They have attended to farming only as a kind of fashionable amusement. They have never taken hold of the work in good earnest, and directed all their energies to it. They have had something else to do all the while, and something else in mind to think about—some great speculation, perhaps, by means of which they have been in hopes of accumulating a fortune in a very short time—something else, besides farming, on which they have relied, to enable them to "turn an honest penny," and to get a living; and they have, therefore, only occasionally directed their attention to farming, as a kind of dernier resort, when all other means of subsistence fail. To such farmers I would say, with all due deference and respect, mind your business. If farming be your business, attend to it; if speculation be your business, attend to it; but do not think of becoming rich by the former, while you are wasting all your energies upon the latter. You cannot serve two professions any more or any better than you can serve two masters. You will be certain to fail in the one or in the other, and perhaps in both. And you have no right to impute your failure in the business of farming to any other than its true cause, your want of skill and attention to the business. Therefore, mind your business.

There is an old proverb which says, that "if any thing be worth doing, it is worth doing well." Nothing can be done well without particular attention—without painstaking—without skill and effort. At all events, there must be mind in the work. We are so constituted, that we can do nothing skilfully and well, while our minds are inactive, or engaged on something else. Our thoughts must be directed to, and interested in, the particular work we wish to do. If farming be that work, we must mind our business.

Warwick, Mass., 1861. John Goldsbury.

For the New England Farmer.

THE SOURCE OF CARBON TO THE PLANT.

Mr. Editor:—It is the prevailing opinion among most farmers that the carbon of cellulose and woody fibre is obtained from the manure and the soil; and hence the land is manured for the purpose of increasing the amount of carbonaceous matter in it, which is regarded as the true source of carbon. That the growth of the plant is in proportion to the amount of organic matter in the soil, there is no doubt; but, that the plant gets its carbon from this organic matter, I deny, and I shall endeavor to show that the carbonic acid of the atmosphere is the great source from whence the plant derives its carbon. For, if we accept the geologic theory of the earth's formation, we evidently conclude that the first plants did not get their carbon from the soil, but from the carboniferous atmosphere, which contained carbon in great abundance, and was so well adapted to that luxuriant vegetation, which gave rise to the coal formation. And it has been shown by Prof. Liebig, the German chemist, that a plant will assimilate as much carbon growing upon a soil that contains no organic matter, (but it must be well supplied with soluble inorganic materials,) as upon a soil of vegetable mould.

De Saussure ascertained by chemical analysis, that about 1-1000 part, by weight, of the atmosphere was carbonic acid; of which 27 3-11 per cent. is pure carbon. And we find by mathematical calculation, that there are upwards of 25,000 pounds of carbon, locked up by the oxygen of the air, to every acre of land.

The green leaf is enabled, by the chemical influence of the actinic rays of the sun, to deodorize

this carbonic acid, and assimilate its carbon to the growth of the plant. Thus it is evident that vegetation, in the presence of sunlight, has access to an exhaustless supply of carbon.

But, says the farmer, if the above argument be correct, how can vegetable growth be in proportion to the amount of organic matter contained in the soil; and what is the effect of manure upon vegetation?

Manure serves a two-fold object in the vegetable economy: 1st, to supply the plant with a quantity of soluble phosphates, alkalies and silica, which is absolutely indispensable to all vegetable growth; 2d, the organic elements generate carbonic acid, which serves as a solvent for earthy and alkaline phosphates and carbonates; and thus renders the inorganic or mineral food capable of absorption. But the silicates, which are not readily dissolved in acid, are soluble in alkali, and hence results the beneficial effects of adding lime and ashes to clayey soils; as it loosens and renders them less adhesive, and also sets free the alkalies which are locked up by the silica in the forms of feldspar, which is a silicate of alumina and potash. In this way it renders the silica soluble, and thus improves and sweetens vegetation by neutralizing baneful acids, and decomposing noxious compounds. N. CRESSY.

Rowe, Mass., June 22, 1861.

MOWING MACHINES.

A few days since we had the pleasure of engaging in the operation of four different mowing machines, on the farm of GEORGE M. BARRETT, Esq., of Concord. The machines used were a two-horse *Manny*, a two-horse *Buckeye*, a one-horse *Wood*, and a one-horse Buckeye. Each machine did unexceptionable work, and at the rate of about one acre an hour.

The first piece of ground entered upon was level and the grass light. The lots had been laid out by Mr. Barrett, the day before, as near each other in size as he could make them without actual measurement. The lot assigned to the one-horse *Buckeye* was cut in the shortest time, cut perfectly, and with ease, though cutting a foot less in width than either of the two horse machines. Although the machine did its work admirably, a considerable portion of the credit must be imputed to the quick and even motion of the horse, being just that short, prompt step that gives a mowing machine its full power.

The second lot entered upon was in a narrow valley, and extending up hill on either side,—one side having quite a sharp ascent. The clover stood knee high, and was very thick; indeed, it was an ambrosial flower-garden, where the spicy pines in the adjoining forest, and red clover vied with each other in filling the air with grateful fragrance.

The two-horse *Buckeye* led the way, turning a double swath through the close ranks of clover in the most gratifying manner. It then took the sharp hill-side and finished that portion of the field. The two-horse *Manny* entered, did not take a double swath, but cut as handsomely as the most critical eye of the best mower would wish to see.

The one-horse *Buckeye* followed in the heavy grass and fully sustained the reputation it had earned in the first field. The *Wood* one-horse machine was also in motion as soon as the way was clear for it, and performed admirably. It is a wonderfully compact and simple machine, and did all its work quickly and well. Indeed, this trial of mowing machines was the most gratifying that we have ever witnessed. Nothing interrupted it. The machines were put into the grass and went directly along, about their business. There were no nuts or screws loose, no gearing disarranged, no clogging and halting, and no apologies from the operators! The work went steadily on until it was finished. Every man seemed to feel, when he started, that he was certain of success—and he certainly gained it!

We do not wish to be understood, that we had not a decided opinion as to the merits of these machines, from what we saw at this trial, and had seen of them before; but it would be scarcely fair to express them until we have actually operated each one of them ourself. A skillful and experienced person may make an indifferent machine work tolerably well, while one lacking those qualities may make a good machine appear discreditable. A person can only form a true judgment by an actual handling and managing the machine for himself. We have already used eight or ten different machines, and intend to be on the *Wood* and two-horse *Buckeye*, as soon as we can.

At about six, P. M., on the same day of the trial at Mr. Barrett's, we put the one-horse *Buckeye* into a thick piece of timothy and clover, moved by a nine and a half hundred mare, who had only been in a machine once before. We were on the field about an *hour and a half*, and during that time had *eighteen* visitors, for whose pleasure, as well as to allow rest to the mare, we stopped several times, and explained the operations of the machine. In that hour and a half we cut an acre, which, in beauty of execution, far exceeded anything that can be done by a hand scythe. There was no clogging, or other difficulty, to prevent continual progress, and with two horses, we have no doubt the acre would *have been cut in forty minutes!* The cutter bar being only three feet, four inches long, one horse will be able to do the work on a small farm, but as the motion in moving should be a quick one, and the draft is constant, he should be allowed to stop once in ten or fifteen minutes and rest. Even with these allowances an acre may be cut in an hour and a quarter.

For the New England Farmer.

ABOUT DOGS.

Mr. Editor:—I had thought that we had heard about enough of the case of "Dogs *vs.* Sheep;" but I see that I was mistaken. Mr. H. M. Couch advances some ideas which are worth examining. What a splendid insight he has given into the physiology of the Sheep! Hear him. "They carry concealed between their hoofs a sack of poison adequate for the destruction of quadruple their numbers at any time!" Well, all that I have to say is, that I have seen as much as one sheep's trotters myself, and would be much obliged to him if he would show, or tell me, where it exists. I have never seen such a thing in a state of health, nor heard of it till the dog-fancier, H. M. C., advanced the idea. I do not know what your Massachusetts dogs are, but suppose that they belong to the canine race, which if they do, and are like the same race in the Green Mountain State, they like mutton; up here, they take a wonderful fancy to it; if a man has a few sheep, and does not watch them as close as a cat does a mouse, the next thing he knows they are *non est inventus*, and if he makes an inquiry about the cause, the dog-fancier comes forward and says they have died of their own poisonous contamination!

Seeing in our State that we have not a dog law, the best thing we can do is to arm and equip ourselves with guns, and poison, in lieu of guns, and take the matter in our own hands, by securing every dog that is away from home without his owner. If I had a flock of sheep, I would shoot every dog that came inside the enclosure in which the sheep were kept; for as sure as dog is their name, they would be chasing or killing the harmless creatures that minister so much to the wants of man.

I agree with H. M. C., in regard to the "nearly extirpated crow;" here they lack considerable of being extinct; the best and only means of ridding ourselves of this nuisance is the rifle and strychnine, and then we can hardly live with them at that; the black-coated gentry seem to think every thing is toll that comes to their mill; corn, chickens, young and feeble lambs, grain of various kinds. I would say but little about his grain proclivities, if he would only let our flocks and poultry alone, but as he will not, I declare war against him, to the utmost extent; still, the crow has some good qualities which entitle him to mercy.

One word to our Saugus friend. The reason why the dogs do not kill as many sheep as in your section is, that the owners of dogs are more fearful of retribution, and so keep them at home more; but dogs will be dogs wherever they go, so we have to keep our eyes open and our guns loaded. Regulus.

Ripton, Vt., June, 1861.

Sucking Cows.—Several years ago I had a young cow which persevered in sucking herself in spite of all the rigging I could contrive to prevent her, and the only way I succeeded in stopping her was to tie her up in a stall so narrow that the sides of it would touch her sides, and feeding her plenty of corn meal until she was fat enough to butcher, and then butchering her. Last spring, I had another likely three-year-old heifer, that had just come in for the first time, commence the same vicious habit. Remembering my former ill success in preventing mechanically, I determined to appeal to her *taste*, which I did by smearing the teats night and morning with soft grease, and then dusting them thoroughly with pulverized cayenne pepper. After continuing the applications about a week, they were discontinued. The cure was perfect, she never having repeated the offence, up to the present time.—*Genesee Farmer.*

For the New England Farmer.

LOVE FOR THE PROFESSION.

Mr. Editor:—Having in a former article demonstrated the fact that "the successful farmer loves his profession," I shall now picture to your readers another class of persons who also "love their profession," and who call themselves "farmers," but who would more appropriately be called "shirkers." This class of people "don't believe in killing themselves by hard work," nor in doing anything they can avoid. Still, they are often known to be carrying on a farm "to the halves," and the reason they assign is, that it is cheaper. But I am rather inclined to think it is more on account of a habit into which they have fallen; for they have long been accustomed to doing work "to the halves," even when they worked on their own farms.

True to the maxim, they "love their profession;" to wit, to do what must be done with the least possible labor. This class of farmers love to keep half a team, or none at all; because, say they, it don't cost so much. They love to get over the ground as quick as possible; consequently, they only half plow it, half harrow it, half seed it, with poor seed, because good seed costs too much, neglect to cultivate the growing crops properly, and finally, in a slovenly manner, only harvest half a crop, inferior in quality, and well mixed with noxious weed seeds. Their stock is managed after the same sort; that is, left to take care of itself. In fact, they have no care for any thing; and one would come to the conclusion, to look over their premises, that "care," in every sense of the word, was unknown to them.

Now one would naturally suppose that these fourth rate farmers would soon get sick of this way of doing business; but no, the love of their peculiar profession predominates; and they will go on, year after year, (if they do not run out entirely,) in the same way. The reason is, not that they do not love good crops, or good stock; but because they love their own peculiar habits better. For the same reason, they neglect to keep good fences, which makes unruly cattle and crabbed neighbors. Speaking of poor fences, reminds me of what I once heard a thorough going young man say to a careless father. Said he, "Instead of keeping the cattle out of the field, you have been training them to jump. You at first built a fence only two rails high, and after you found that would not stop them, you put on another rail. Soon, they could jump this, and you put on another, and another, till at length they could jump a six rail fence! Now if you had built a good four foot fence in the first place,

you would never have been troubled with unruly cattle." The above case illustrates the slack system perfectly; the advice given, I consider good.

Nor is this all. The bogus farmer loves poverty better than riches; else he would strive to be independent. But instead, he loves to depend upon his more fortunate (lucky, he calls them,) neighbors, for any thing he does not happen to have. He is, as I heard an old lady express herself, "forever eternally borrowing something or other." He loves to borrow, for he says it is cheaper than to buy. T. P. BAILEY.

Newbury, Vt., 1861.

ERRORS AND REQUISITES IN MAKING BUTTER.

It is often remarked that good dairies cannot be made without good dairywomen, and I take the liberty to assert that it cannot be done by the best dairywomen in the world, unless provided with the necessary conveniences. I would like to see dairywomen having skill enough to make first quality of butter from milk drawn from cows whose temperature has been raised to fever heat by fright and running, yet dairymen sometimes expect this; and will buy the poorest cows, give them about half enough to eat, furnish a very poor milk-room, other fixtures in proportion, and then find fault with their good wives, for not making better butter, and more of it.

On the other hand, there is one fault peculiar to the dairywomen of the country, originating in the fact that each thinks she makes *the very best butter* that is made anywhere. Consequently, the husbands are censured for not getting as much by two or three cents a pound, as some other man does. If I can ever be forgiven by dear women for saying this, (and I know their charity is boundless,) I will tell them how to remedy this bone of contention. Never allow a butter buyer an opportunity to find fault with your butter, but tell him before he sees it, "that if it is faulty you would be pleased to have him tell you the whys and wherefores, and you will in future apply the remedy." My word for it, you will make it pay in the end, to do so.

As to the cows, I make it a point to get those with a good yellow skin, the quality of the milk being very essential in the making of good butter, that of a fine yellow color always having the preference, and such butter cannot be made from cows with pale, colorless skin.

The next point is, food for the cow, which should be of the best quality, and plenty of it. The pasture should be where there is abundance of good sweet feed, with a plentiful supply of water. The quality of feed has much to do with the quality of butter.

The milking should be done with neatness, the milk should be kept in a good cool place, properly ventilated, and everything about it kept clean and sweet. I prefer to have the milk-room above ground, as I think the cream rises better in most kinds of weather, than it does in cellars. We use tin pans placed upon racks for setting the milk, letting it stand a sufficient time for the cream to rise, which is generally, in warm weather, about thirty-six hours, but I think that it requires great care and good judgment on the part of the dairywomen, to see that the milk does not stand too long before it is skimmed, as, for instance, in very muggy, hot weather. Before thunder storms the milk will sour very soon, and if it is not attended to at the proper time, you will be likely to have a poor churning of butter, which injures the sale of a dairy very much. Hence the state of the weather and other circumstances must govern you in regard to the time you allow the milk to stand before it is skimmed. The cream taken off at night should be set in a cool place in the cellar, and churned in the morning.

Now for the churning process, which requires judgment and skill in regard to temperature of cream. My experience is, that in warm weather it should be about fifty-five degrees Fahrenheit, but the general opinion is from sixty to sixty-five degrees; that I think too warm, though much depends upon the place and state of the atmosphere where you are churning. The cream naturally grows warmer by churning, especially if the air that is thrown into the churn is warmer than the cream, and the reverse—if the atmosphere is colder than the cream, it would grow cold. You should be ruled by circumstances in this matter also. When the butter comes, it should be taken from the churn and the buttermilk worked out. We prefer to wash with cold water, thinking that we can remove the buttermilk with less working than without the water. Then it should be salted with good pure salt, about one ounce of salt to a pound of butter, thoroughly worked in, then covered to exclude the air, and set in a cool place for twelve or twenty-four hours; when it should be worked again sufficiently to free it from buttermilk. The moment that is done it should be packed in the firkin and covered tightly to keep it from the air, and when the firkin is filled it should be covered with a cloth and a strong brine made of salt put on the butter, and kept so until it goes to market.

I repeat the assertion that it requires good judgment and skill to manufacture a fine article of butter, but the cost is no more than an ordinary article, and not as much as a very poor article. Butter will absorb impurities quicker probably than any other article; hence it should be kept away from all impure or strong scented substances if you would keep it from getting tainted with bad odors.

One error in butter-making is over-working, which leaves it salvy, and destroys the grain, lessening the price much. Another is not working enough to remove the buttermilk, which renders it unsaleable. Another is not salting enough, while others salt too high; another is a cheesey substance we sometimes find in cream and butter, which makes it very unpalatable, and injures the sale. All these defects should be avoided, and I think can be, with proper attention.

One great beauty of a dairy is to have it as nearly alike as possible, uniformly of the best, through the season, which can only be done by the greatest care and attention. Ice is very necessary in most localities, especially in the warmest part of the season. Some very fine dairies frequently have what is called "warm weather butter," which injures the sale of the whole very much. What I mean by this is, that in the hottest weather, unless you have ice, or very cold water, the butter will come soft, and it is very difficult to make a fine article.

Without wishing to detract from the credit of Chenango county butter, I think a large quantity of it might be improved from two to five cents a pound, which would well repay extra labor. I desire to advise young women who think of working in a dairy, to learn to make a fine article if they have not already done so, and if they cannot learn effectually without, it would pay them well to go in some place where they know how, and give one summer's work to learn, in increased wages afterward, and eventually in winning golden opinions for their husbands.

I will guarantee any one's success who follows the rules laid down—to attend to every branch of the dairy, just when it requires attention, and to watch the markets closely, making it always a point to sell when buyers are anxious to purchase. If I have failed to give you a satisfactory answer, as to my good luck in the dairy business, I hope some one more competent will take up the subject and do it better justice.—JOHN SHATTUCK, *Chenango Co., N. Y., in Country Gentleman.*

VALUE OF SHELTER FOR SHEEP.

Wm. H. Ladd, one of the best farmers of the State of Ohio, who has given especial attention to sheep, gives the following careful estimate in the *Ohio Farmer*, of the value of shelter to sheep, suggested by the remark of a neighbor, that "It won't pay to build shelter for sheep." This neighbor kept 1000 head and lost many animals, and it was from his losses that a part of this estimate is made:

Let me make some very low estimates in reference to the loss occasioned by this treatment in thirty years. First, if the sheep sheared two pounds of wool per head under this treatment, they would have shorn three pounds had they received good care. Second, one pound difference per head on 1,000 sheep makes 1000 pounds; 1,000 pounds in 30 years, at 40 cents per pound, $12,000. It is a very low estimate, counting sheep at the lowest common price, that a flock of 1,000 sheep should yield $500 worth of surplus stock to sell each year; this in 30 years amounts to $15,000. Feed saved by shelter, say $200 each year, worth, in 30 years, $6,000; simple interest at 6 per cent. on amount saved in 30 years, $30,690; difference of the value of the flock on hand at the end of 30 years, $1,000; value of shelters to the proprietor at the close of 30 years, $1,000; amount saved, $65,690. Per contra—shelters cost say $3,000; additional grain fed, say $400 each year, in 30 years $12,000; interest as above, $16,560; for keeping shelters in repair, $1,000—total $32,560. Difference in favor of shelters and good care, $33,130. Don't look at this as a fancy sketch; it is a reality, and the only incorrectness about it is, that the estimated difference in favor of good keeping is in every particular below the reality.

COE'S SUPERPHOSPHATE OF LIME.—We have before us two or three letters from JOSIAH WHITE, Esq., of Petersham, Mass., ordering of Nourse & Co. at different times Coe's Superphosphate of Lime. In one of these letters Mr. White says:—"I am realizing great benefit in the use of the phosphate by the check it gives the wire worms; my neighbors on all sides are losing nearly their whole crop of corn in consequence of the ravages of these pests."

Mr. White is one of our best farmers—a gentleman qualified to make accurate observations upon the operations which he undertakes. His testimony in regard to this, or any other manurial agent, is entitled to the highest respect. We are experimenting with this phosphate on our own farm, and intend to state results by-and-by.

THE OLD WOODEN PLOW.

A STAFFORDSHIRE DITTY.

Up by the Blake Mere o'Morridge not long time ago,
There lived an old chap, wi' an old wig o' tow,
His name was Tom Morris, and I'll tell you how
He made a discourse on an old wooden plow.
Gee ho, Dobbin; gee ho, Dobbin; gee ho, Dobbin!
Gee up and gee ho!

'Twas the tenth of October, and though oats were just ripe,
On the settle he sat, and he smoked his long pipe;
And he thought a long time about this thing and that,
And said "Tommy! sit down, and I'll tell thee what's what."
Gee ho, Dobbin! &c.

"These are terrible times, lad, prithee come nigh,
And I'll gie thee a wrinkle or two ere I die;
I can't stand it much longer, it shortens my breath.
These new-fangled notions will soon be my death.
Gee ho, Dobbin! &c.

"They're going too fast, lad, I tell thee, a deal;
There's Lord Talbot, o'Ing'stre; and Ralph Sneyd o' Keel;
And Sandon, and Buller, and Main'ring, and Bill—
Lord, the stuff they've been taking, it makes me quite ill.
Gee ho Dobbin! &c.

"With their bones and their acid; their drills and gu-hanner;
Thy grandfather, Tom, niver farmed 'i that manner;
He'd a stared hard enough, if he'd heard what they say
About boiling o' oil cake, and chopping o' hay.
Gee ho, Dobbin! &c.

"Then soughing's a thing as in course they mun alter,
So they go a mon's depth for to get at th' top water—
And they scoop out the dirt wi' a thing like a spoon,
And for tiles! they'll be using o' bacca pipes soon.
Gee ho, Dobbin! &c.

"Then they prate o' their carrots and mangels, and sich—
As if carrots and mangels would make a man rich,
Of hoeing o' turnips, and clearing o' yallows—
Stuff and nonsense! and growing o' wheat without fallows.
Gee ho, Dobbin! &c.

"It makes me to loff! without fallows indeed!
Why, I think they mun ha' a soft place in their head.
But what dun ye think they've been doing just now?
Why, they've got up a loff at an old wooden plow.
Gee ho, Dobbin! &c.

"Aye! an old wooden plow—and they say, to be sure,
As the wide-awake farmer mun use 'em no more;
They mun a' be of iron, and wood there's no trade for—
Why, what do th' fools thinken as ash trees was made for?
Gee ho, Dobbin! &c.

"Talk o' plows made o' iron; why, th' next thing they'll do.
As sure as you live, they'll be painting 'm blue;
Then they've two tits a breast, as they call a 'ge ho'—
They may call long enough, but they never can go.
Gee ho, Dobbin! &c.

"No! gie me a good wooden plow as is strong,
And a good pair o' big wheels to help it along,
And four long-tailed tits and a mon and a lad,
And a good steady place, and it shanner be bad.
Gee ho, Dobbin! &c.

"But Tommy, my lad, niver heed what they say,
But get thee on still i' thy father's old way;
They'll bring all their hogs to fine markets just now.
But stick while thee liv'st to thy old wooden plow."
Gee ho, Dobbin! &c.

EXTRACTS AND REPLIES.

CAN'T GET THE MILK.

I have a very nice heifer that has a calf some three weeks old. Up to the time the calf was two weeks old we stripped her night and morning after the calf, and as a milker she was all that could be desired. Last Thursday night we found that the calf had not sucked the two front teats, neither were we able to get any milk from them. The teats are soft, the udder is not caked, and one would suppose he was going to get a big stream of milk, but it shoots up into the udder—and a stream not larger than a cambric needle is the best one we can get. I have probed the teats to the depth of five or six inches, meeting with no sort of obstruction—and producing a benefit that is scarcely perceptible. The teats are soft and natural, and no signs of inflammation exists. Such, I believe, comprise all the facts in the case; now if you will give us the cause and cure, you will much oblige a constant reader of the *Farmer*. A. P. SLATER.

Somerset, June 25, 1861.

REMARKS.—The orifice through which the milk passes is sometimes obstructed by being trodden upon, or by disease. When this is the case we have known a complete remedy gained by grinding one part of a pair of scissors sharp on both sides, and pushing it up the orifice in the teat with care. Take hold of the teat with the fingers of the left hand, and take hold of the scissors with the thumb and finger of the right hand, and with a quick but gentle push, cut the orifice so that a free stream of milk will flow out.

—

"OVERFEEDING OF STOCK."

Farmer Sheldon, of Wilmington, remarks in his letter to Mr. Proctor that he has attributed the "cattle disease," so called, chiefly to overfeeding. It may not be easy to demonstrate this theory of the disease; but it has enough of plausibility, to commend it to investigation. As the learned Secretary of the Board of Agriculture has devoted many of the pages of his last report to this disease, and as a large proportion of the agricultural appropriation from the Treasury of the State for the last three years, has been thus applied, I respectfully suggest the topic to the consideration of the Board of Agriculture, and hope that Mr. Dawes, Mr. Loring, Mr. Grennell, or some other equally intelligent and persevering member of the Board, will give it their attention. I would not presume to dictate—but surely there can be no harm in the suggestion—as it is said "a cat may look upon a king." ESSEX.

June 22, 1861.

—

CROPS IN NEW HAMPSHIRE.

The fruit crop is a total failure, with the exception of apples, and they are mostly bitten by the curculio. Wild berries promise well; strawberries abundant; grass good and forward; corn backward and failed to come up well in many cases; other grain and potatoes look as well as usual at this season of the year. A. J. DODGE.

Francestown, N. H., June 22, 1861.

THE CHAFFING MACHINE—EXPLANATION.

In your reply to E. S. Fletcher, inquiries respecting the Chaffing Machine alluded to by "K. O.," you suppose that a common hay or straw cutter is meant. It is not so. The machine crushes first and then cuts very much finer than any other I have ever seen. A large quantity of the chaff is not much thicker than a wafer.

It is called the Telegraph Tedder cutter No. 1, made by T. H. Wilson & Co., Harrisburg, Pa., Patented in Feb., 1858. JOSEPH COE.

Rochester, June 24, 1861.

—

PLASTER ON MOWING LANDS.

Would it be beneficial to spread plaster on land immediately after the grass is taken off?

How much would be the best quantity per acre?

In slaking the lime for the incombustible wash, should it be dry when it is done slaking, or thin enough to run? A. F. FLAGG.

Sheepscot Bridge, Me., 1861.

REMARKS.—Certainly. It would undoubtedly be economical. Sow two or three hundred pounds per acre. The lime should be dry.

—

TO KEEP FOWLS FREE OF VERMIN.

Throw all the refuse from your onions into the hen-house, and all vermin will soon quit the premises. H.

New Britain, Ct., 1861.

CHEMISTRY FOR THE MILLION.

Hydrogen.—A colorless gas, about fourteen times lighter than air, used on account of its levity for filling balloons. Water is composed of one part by weight of nitrogen to eight parts of oxygen. If you simply heat a gallon of water it will expand into some 1700 gallons of steam; but if you decompose a gallon of water, that is separate the oxygen from the hydrogen, it makes 1000 gallons of the former, and 2000 of the latter; and then if you mix the two and set fire to them, they return back with a violent explosion, to one gallon of water. It is quite possible to educe light and heat from water, but as no economical mode of doing it is yet discovered, we shall probably have to resort to other materials for replenishing our hearths and lamps a while longer yet, notwithstanding Mr. Paine's promises to the contrary. We do not despair, however, of important discoveries being yet made in this line; and if they should be, let us not be more surprised than our fathers would have been at the thought of sending our errands by electricity across the ocean in a second, a thing which we hope is on the eve of being done.

Iron.—This is too well known to require us to speak at large here. In another place we shall illustrate facts concerning it of great importance to the farmer as well as to many others.

Manganese.—This is a metal somewhat resembling iron. Like iron it exists in most soils, like that it is never found separate from other substances, but has to be prepared like iron by separating it first from other matters with which it is combined.

Potassium.—This is a brilliant silver-white metal, light enough to swim in water, and so combustible, that it takes fire and burns with a great heat, on falling upon water, however cold, or ice. It is the basis of potash; and it exists in all soils, as variously compounded with other substances, also in all plants, and in the animal tissues.

Sodium.—This is the basis of soda; is a dingy whitish metal, comparing in appearance with potassium about as copper does with silver; is lighter than water; floats on water and takes fire, if the water be a little warm, but is not enkindled, like potassium, by cold water or ice.

Calcium.—This is a yellowish white metal, and is the basis of lime. It is very abundant in all limestone regions.

Magnesium.—A white, shining metal, the basis of the magnesia of the shops.

Aluminum.—The basis of clay; a bright silver-like metal, not easily rusted, having nearly the strength of iron, with little more than the weight of wood.

Of these elements, it will be perceived that four, oxygen, chlorine, hydrogen and nitrogen, are gases. Four, sulphur, phosphorus, carbon and silicon, are solids, at ordinary temperatures. Seven, iron, potassium, sodium, calcium, manganese, magnesium, and aluminum, are metals.—*American Farmer's Magazine.*

For the New England Farmer.

MOWING MACHINES AND BORERS.

Mr. Brown:—I noticed in your paper of June 15th, an article about mowing machines, by Mr. Shaw, of Kensington, and also a week later, a reply by Mr. Draper. I think that Mr. Draper is about right; and Mr. Shaw is evidently much mistaken, if he thinks there is no other mower but the Manny that is fit for, or will work on uneven ground.

I am a young farmer, interested in labor-saving machines. About a year ago, there was a trial of machines at Durham; and as I thought of buying a machine, I attended the trial for the purpose of examining the various machines there exhibited; and I formed a very favorable opinion of the Buckeye machine; in fact, it was generally acknowledged that it did the best work, though many doubted its adaptation to uneven ground, and for this reason purchased the Manny. On my return home from the trial, I told my father that I considered the Buckeye best of all the machines exhibited. He immediately purchased a Buckeye machine, with which we cut the last season seventy-five acres of grass; some of the ground was very uneven; notwithstanding this, the machine worked well, and equaled our expectations. In short, it never failed to work well when the knives were in good order.

The second time we used the machine, was on a very rocky piece of ground;, the result was, that we broke three knives; and the next day, the report had gone through the town (by some persons interested in the Manny machine) that we had broken all the knives, and could not use it, &c. We ran the machine against stumps, stones, and bushes, and in one instance broke the draught-chain, (by the way, we used oxen instead of horses,) without any apparent injury to the machine.

We once used the machine on a very uneven piece of ground, being on a bank by the side of the river, and at an angle of nearly forty-five degrees; it did the work well; and a person visiting the spot a few days after, would hardly believe that a machine could be used on such ground.

We have taken out rocks (when driving at full speed,) weighing from fifty to eighty pounds each; and where was the machine? Mr. Shaw will ask. I will answer by saying, that it was going right along, cutting the grass as well as ever.

I don't pretend to say that driving against such obstacles may not injure the machine; but I *do* say that every hassock, as Mr. Shaw indicates, will not stop the machine.

I am in no way interested in the sale of mowing machines, and will not attempt to put down, or speak against any machine; but will only speak of the merits of the Buckeye, which I know from experience.

I did not think of writing till after reading Mr. Shaw's article. I think that too much confidence is often placed in the recommendations of agents, and thereby that persons about to purchase machines are deceived. My advice to persons about to purchase machines, is to be present at some trial and judge for themselves.

I notice that some of our young apple trees are troubled by the borers. Can I do any better than to dig them out? Would not ashes, or something similar (if placed around the trees at setting) prevent the mischief? Perhaps you, or some of your subscribers can give the desired information. V. M. Coleman.

Newington, N. H., June 25, 1861.

Remarks.—Destroy the borers with a wire, or something else. Ashes will not prevent their depredations.

For the New England Farmer.

HOW TO GET TURNIPS.

Mr. Editor:—As I was passing through Middleton to Andover, yesterday, I noticed on the margin of the brook, near the residence of the venerable Deacon Stiles, (now near eighty years old,) several acres covered with a verdant green. On inquiry, I found these acres were cultivated by his son, Mr. Hiram O. Stiles, with turnips, an article that he has supplied to our market earlier and better than any other man, for a half dozen years last past.

I was curious to learn of him how this culture was carried on. He unreservedly told me how he managed; and at the same time said others could do the same if they would take the same care he did. First, he plows with a Michigan plow, about eight inches deep, and thoroughly pulverized the soil, applying at the same time a moderate dressing of well-fixed manure; sometimes a little guano, and all the ashes he can readily command. Having levelled the surface, he distributes the seed in rows about sixteen inches apart, and thins out the plants, so as to leave sufficient space for the bulbs to expand. He takes care that no weeds are on the ground, be-

lieving that the turnips mature better without their company. He plants his seed as early in April as the land is ready, (the present year from the 15th to the 20th,) and have the plants ready to gather in about two months after planting. Some years he has sold 10,000 bunches, at an average price of six cents a bunch; the present year he hopes to sell as many. His crops have been annoyed by the maggot, and other insects; but in preparing them for the market, he rejects all that are in any measure marred or injured in their appearance. He is, in truth, a genuine, honest man, a worthy representative of the good old Puritan deacons; one that demonstrates his faith by his works; this is the kind of religion that I think worth cultivating. P.

June 25, 1861.

LETTER FROM MR. BROWN.

AMONG THE CORN AND FLOWERS.

"For who would sing the flowers of JUNE,
Though from grey morn to blazing noon,
From blazing noon to dewy eve,
The chaplet of his song to weave,
Would find his summer daylight fail,
And hear half told the pleasing tale."

Auburn, N. H., June, 1861.

GENTLEMEN:—Prompted somewhat by business, more by affection and a desire to find that *aqua vitæ*, or water of life, which it is said may be found among the crystal lakes and lofty hills of this State, I am spending a few days in this region. Auburn nestles modestly on the banks of a winding stream which connects the Lesser with the Great Massabesic Lake. These lakes are about two miles apart, and the larger of the two,—it being about thirty miles around it,—is one of the most charming of our New England lakes. It is skirted by good farms, has delightful shores of white sand, smooth, green pastures, or promontories of rock, or a tangled undergrowth of rank vegetation. It is studded with numerous islands, which are often visited by strangers, or the citizens of the neighboring city of Manchester, who have supported a hotel on its westerly shore, and a steamer on its waters. Fine pickerel, perch, and other fish, which may be taken by those who "love virtue and angling," often allure the pleasure-seeking to these islands for a "chowder" and a "fry." Indeed, all that this modern *Auburn* needs to give it a name co-existent with that

"Sweet *Auburn*, loveliest village of the plain,"

is the power of the poet's pen. What are the charms of the *plain*, compared with those of the valley, with its surrounding hills, its sparkling waters, murmuring brooks, busy mills, and hum of industry at every turn!

Our ride here was a delightful one. The faithful mare, "Nellie," hitched to the "one-horse shay," myself and wife, (may heaven ever bless her,) made up the party. A shower, the night before we left old Concord, had suppressed the dust and cooled the road, so that the air was bland and pure, and gave us that delicious exhilaration not to be found under "corks" of the first water, or in the fetid streets of any city. But this bewitching coolness and exhilaration were not all; some *One* had preceded us and planted our way with flowers of exquisite hue and perfume. Who could it have been! Scattered along the roadside, sometimes even under the wheels, was the rather flaunting *Ox Eye Daisy*, or *Day's Eye*, (White Weed,) with its open rays, like a man's thought in his hand, where all may see it. In the low places, the *Sweet Flag* sent up its close ranks, hoisting its purple flowers to contrast with the pale green of its leaves; while near by, on the higher ground, numerous varieties of the *Blackberry*, or *Brambleberry* family were glittering with white and delicate flowers. Here they ran over a large rock, covering it with their numerous runners and delicate foliage, and there, a more aspiring member of the same family nodded his white plumes to us over the wall as we passed along. The aromatic *Yarrow*, not yet quite in bloom, and the *Sweet Fern*, sent up their delicate odors to the breeze, while the *Buttercup* on the edge of "the run," vied with its stouter neighbor, the *Cowslip*, a little lower down and in the pool, spreading out their yellow dresses to the sun, and attracting the attention of the traveller.

But all this was little, grateful as it was, compared to the display "over the wall!" Some unseen hand had wrought wonders there! A world of blossoms! Acres extending beyond acres of the beautiful, sweet clover blossoms, surrounding us with a delicious fragrance, whether on the hill or in the valley, gracefully bowing their heads, and ever sending forth streams of aroma to man and beast and bird; and all seemed to appreciate the blessing—for the birds made the air vocal with their tuneful notes, the steed seemed to receive new life, while our hearts burned with grateful emotion, and our lips could not fail to express our thanksgiving and praise.

There was *harmony* everywhere. The spicy pines sent their odors to the breeze, which were wafted to the fields in return for the fragrance of the clover blossoms or the new-mown hay. They also "sung a hymn," so perfect in its cadences and chords, that human tongue has never yet equalled it—nor ever will. It was

"A noise as of a hidden brook,
In the leafy month of June;
Which to the sleeping woods all night
Singeth a quiet tune."

So, ambling along in this great flower-garden of Nature, I often thought of the ecstacy of Columbus on first approaching our shores—and felt something of it, too. "I know not," says he,

"where first to go, nor are my eyes ever weary of gazing on the beautiful verdure. Here are large lakes, and the groves about them are marvellous.

"As I arrived at this Cape, there came off a fragrance so good and soft of the flowers or trees of the land, that it was the sweetest thing in the world.

"The land is covered with trees and shrubs and herbs of unknown kind, and of rich vegetation. The climate has a soft temperature, the air is delicate and balmy; the land high and with fine verdant hills."

I am gratified in finding the crops on my way looking well. Grass is quite forward, and, with a few timely showers, must produce a more than average crop. Corn is rather higher than it was in Massachusetts when I left—is of good color and promises well. The spring grains and winter rye appear promising. Potatoes have been put in freely, and are coming on finely. Mowing machines will be largely introduced in the haying season, and every one seems to feel the importance of producing the greatest possible amount of the products of the soil.

I find all persons, women as well as men, and boys and girls, full of an ardent patriotism, and a love of country that is willing to sacrifice everything but liberty and honor to maintain its glorious flag. Companies are marching and drilling, young men are volunteering, and women and girls are sewing, and preparing for the departure of their husbands and brothers. The clergy have caught the inspiration, so that the first preaching I heard was a regular war sermon, and well was it sustained by scripture texts. The first hymn sung contained the following verse, which I consider somewhat plucky:

"As sure as God's own promise stands,
Not earth, nor hell, with all their bands,
Against us shall prevail;
The Lord shall mock them from His throne;
God is with us; we are His own;
Our victory cannot fail."

The right feeling prevails. The free States are unconquerable, either from within or without.

Your friend, SIMON BROWN.

Messrs. NOURSE, EATON & TOLMAN.

HOW TO TAKE OUR MEALS.—The tables of the rich and the nobles of England are models of mirth, wit and bonhommie; it takes hours to get through a repast, and they live long. If anybody will look in upon the negroes of a well-to do family in Kentucky, while at their meals, they cannot but be impressed with the perfect abandon of jabber, cachinnation and mirth; it seems as if they could talk all day, and they live long. It follows, then, that at the family-table all should meet, and do it habitually, to make a common interchange of high-bred courtesies, of warm affections, of cheering mirthfulness, and that generosity of nature which lifts us above the brutes which perish, promotive as these things are of good digestion, high health, and a long life.—*Hall's Journal of Health.*

KILL THE MILLERS.

The following, from a farmer in New Jersey, may be of interest to many. He says:

Some ten years ago I purchased the property where I now live. The former owner, being quite a man for fruit, had set a large variety of trees. The farm was noted for producing more fruit, and a greater variety, probably, than any other farm in the neighborhood.

At the time of my purchase the trees were on the decline. The cherry and plum trees were covered with black knots, and the fruit was wormy and worthless, so that I was about to cut them down and supply their places with shade trees; but disliking to part with the fruit, and observing that the enemies were at one stage of their existence in the form of a miller, my plan was to destroy them while in that stage. With that object in view, and observing that they were fond of a light, in the early part of the summer of 1855, I commenced their destruction. To do this I elevated a brisk blaze about five feet from the ground in the vicinity of my trees. The first evening, between eight and eleven o'clock, the millers destroyed might have been counted by hundreds, which gradually diminished, so that at the end of one week, there were none to destroy. I then discontinued my fire until the latter part of the summer, when I discovered another crop of millers, and again built them a blaze. I have followed the same course whenever the candles have drawn them, to give them a light of their own, which has been twice in the summer. Now for the result: My trees have gradually resumed their former rich green; those knots have fallen from the cherry and plum trees; and this year the crop of Morella cherries has been probably as large as they ever were, and that on trees that were considered worthless five years since, and the fruit, both cherries and plums, not wormy.

WHY DO HENS EAT THEIR EGGS?

It has already been stated that eggs are composed chiefly of *albumen*. Now, when fowls are compelled to eat, grind, and digest a large quantity of coarse food, which contains but little albumen, there is a longing and hankering after more nourishment, or something that will supply the waste of their systems, which is daily passing off in the form of eggs. I suppose that this hankering is not unlike the sensation which a man feels who is making an effort to abandon the use of tobacco, although I am not able to speak from *personal experience* in such a matter, having never tasted nor smoked the "devil's weed." Consequently, they are ready to devour anything that is eatable, and as soon as they get a *taste* of eggs, they find that they obtain a large quantity of just the nourishment which is demanded by their systems, and but little time and muscular energy is required to transform it into eggs again.

Another thing, also, which induces hens to eat their eggs, is, they have a hankering for some-

thing that will form *a good shell*; and nothing is better for that purpose than the very shells. Consequently, when the shells of eggs are thrown to hens, when only broken in two, it will often learn them to try a whole shell when the egg is in it.

Fowls, when laying, must have *lime*. I keep a dish of clear lime always within their reach. This is far better than to compel them to pick and work over a lot of mortar, for the sake of obtaining only a small quantity of lime. Every egg shell should be broken into small fragments, and mingled with fresh meat chopped fine, or with scalded meal thickened with milk, or even made thick like mush. By allowing hens to have all the lime they need, the egg shells will be much thicker and more firm, than they will when hens are compelled to find materials for the egg shells only in their food, or in bits of old mortar, or by eating lumps of earth.—*Country Gentleman.*

For the New England Farmer.

HORSE AND CATTLE SHOEING.

The following article, on *Horse and Cattle Shoeing*, was read before the *Concord Farmers' Club* last winter, by FRANCIS E. BIGELOW, a member of the Club. Mr. Bigelow has had large experience in his business. He looks into the reason of things, and means to progress and improve in his art.

When I first saw the topics for discussion, I was a little at a loss to know what "HORSE AND CATTLE SHOEING" had to do with agriculture. But as you discuss Farms and Farm Implements, I suppose you call the horse and ox machines or tools, and as they are indispensable in your work, they must be kept in order.

I will give you some general rules for horse shoeing, and note some errors generally practiced in the care of horses' feet. It is generally considered that shoeing has accomplished all that can be expected of it. If the shoes are only firm on the horses' feet, when his services are required, little thought is given, whether they are tight and pinch his feet, or are easy and comfortable, so long as he can go without being lame. "No foot, no horse," is a truth, which has been realized by too many when the horse has been harnessed for a ride, of business or pleasure, and starts off, keeping time with his head, with the precision of a drill sergeant.

The horse's foot is made up of a variety of textures, so beautifully combined as to form one complicated but perfect spring, and unless that spring is permitted to have constant freedom of action, it very soon gets out of order, and the horse becomes unfit for use. If horses were properly stabled and shod, they would doubly pay for the extra care bestowed upon them, by the increased service they would render. Too many of our horses are over-driven and over-worked, and not properly cared for when they are put in the stable. Their feet soon get out of order, and the smith is often blamed if the horse is lame, when, in fact, it is more the fault of the owner than the smith. One thing is certain, our horses have not proper stables to keep their feet in good condition; a hard, dry floor is a bad place for horses' feet. A pen where they can be turned in loose on the ground is a better place, and would keep their feet in better condition.

There is a great difference between horses' feet which work on the farm, and those that travel on the road. The farm horse being on the plowed land, the rains, dew and damp soil keep his feet moist and elastic. But the feet of the horse that travels are liable to become dry and hard, and often contracted. There is no general rule that can be applied to shoeing horses, because there are scarcely two sets of feet alike.

There is no kind of work I am acquainted with that requires more judgment than horse shoeing. All smiths pretend to know something of it, but some make bad work. After the old shoes are removed, the next thing is to pare the hoof—and how much? The best rule is to cut away till the hoof will give under the hard pressure of the thumb. Some hoofs require but little, merely enough to level; others, when the hoof grows strong, require more.

One grave error that most smiths practice, is cutting away the frog to make it look clean and nice. This tends to make it dry and hard, and as that is an essential part of the foot, it is better to let nature take care of it. It is my practice to cut off the heels, when the frog is small, to let it have a chance to spread, but some think that unnecessary. When the hoof is contracted, it is best to cut till the hoof is tender and have the shoe removed often. After the hoof is pared in proper shape, the next thing is to select a shoe. If a horse has a thin, flat foot, he should have a heavy shoe. For a strong hoof a lighter one is better. The web of the shoe should be wide at the toe, to give it strength, and narrow and thick at the heels. The shoe must then be fitted to the foot, and *not the foot* to the shoe. This is of more importance than any other part.

Every shoe should be more or less seated on the foot surface, to prevent it from pressing on the sole—but have a perfectly flat surface on the outer edge for the crust to rest on. The amount of seating must be determined by the condition of the foot. For instance, a broad foot, with a flat sole—and thin hoof, will require a wide web and considerably seated, to prevent it pressing on the sole; but a narrow foot, with a strong arched sole, requires a narrow web and less seating.

There should not be too much space between the shoe and the foot, as the dirt will get pressed in and often cause the horse to be lame. One of the most important parts is in fitting the heels; they should not press at all, but be raised from the heels and perfectly level. Some smiths make the heels concave, which has a tendency to contract the hoof. If we should adopt the English mode of shoeing, we should have the heels turned in the exact shape of the hoof, which would be a very serious objection to our horses. They have their shoes removed once in four weeks; our custom is ten or twelve, and some get them fastened, to keep them on four weeks longer!

Six weeks is long enough. If the shoe just fits the foot, when it has been on ten or twelve weeks it is drawn forward so that it does not protect the heels, and becomes imbedded in the hoofs nearly a quarter of an inch, and is then very liable to lame the horse, especially if he has corns; consequently we are obliged to have it project a

quarter of an inch or more beyond the hoofs. A clip should be turned up at the toe to hold it firm in its place, and prevent the nails from breaking. Sometimes one on the side serves a good purpose. There is one thing I approve to which some object, that is in scorching the shoe on the foot when it is being fitted on. I do not believe in burning too much, but enough to give it an even bearing. If the hoof is thin, merely scorching is sufficient, but on a strong hoof a light crust can be burned without injury; a shoe will remain on longer, and prevent the nails from driving up through, which always looks bad, and is liable to get loose. Another important thing is, the groove for the nail heads. It should be just wide enough to admit the head. The holes should be punched under at the toe, and straight at the heels, to admit the proper depth of the nail. On this point smiths differ: Some think one inch hold is sufficient, as more would injure the foot; others think one and a half inch necessary. That depends entirely upon the hoof.

The number of nails generally used is from 7 to 10, according to the size of the shoe. Some writers think 5 is sufficient. If it is a light shoe, and fitted perfectly to the foot, 5 will hold, but to remain on ten or twelve weeks, as is the custom with us, more are better. Bar shoes I have not used for several years, as I believe a horse can be shod as well without them. They are clumsy, and keep the frog from growing in proper shape. False quarters can be cured in a short time, with care. The heels should be pared low, and the shoe should be removed once in three weeks, till a cure is perfected; at the same time a gash should be burned or cut at the top of the crack. The false quarter should never be allowed to bear on the shoe. One reason why horses are troubled with corns, is, their shoes remain on so long. The best way to cure them, is to have their shoes removed often, or turn them out to pasture without shoes.

The hind foot is differently formed from the fore foot. Nevertheless, the same principle in fitting is required. One difficulty we have to contend with, is the interfering of horses. That may be prevented by straightening the inside of the shoe, and cutting away the hoof. Sometimes it is necessary to have the inside of the shoe thick, to cant the ankle, to let the other foot pass by without striking.

Over-reaching is prevented by setting the hind shoe back, and let the hoof project over the shoe. That will prevent the shoes from striking. Another mode is to have a high heel calf, and low toe, on the fore shoe, and a high toe and low heel on the hind shoe, which so alters his gait that he will not strike. Various causes have combined during the last few years, to enhance the value of horses, and it has become incumbent on every one, to communicate any information he may have gained by experience and observation, which he believes may be of use to his neighbor, concerning a matter of so much importance as the soundness of the horse's feet.

The matter of shoeing oxen, compared with twenty years ago, is of so little importance that I do not make much account of it. Then four hundred yoke were shod in my shop in one winter; now only about forty yoke. But the shoeing is as important now as ever. No two smiths make ox shoes alike. The shape is of little consequence, if the outer edge fits the foot. The most important part is in having the shoe properly seated. It should be plated out and left crowning, to prevent it from pressing on the sole, but level on the outside edge, for the crust to rest on. The hoof should be pared level. The holes should be punched under at the toe, and straight and near the outer edge at the heel. From 6 to 9 nails are used, of a small size, as the hoof is generally very thin. The shoe should be more than long enough to cover the foot, as the ox will travel easier than with a short shoe. Most of our oxen are only shod once a year, and their feet are generally very thin. Sometimes it is almost impossible to shoe them without their becoming lame.

FISH AS AN ARTICLE OF DIET.

Fish is largely eaten by all classes, and is certainly nutritious. Great differences are noticeable in the different species. Many kinds have large quantities of oil—as the eel, salmon, herring, pilchard and sprat; and these are therefore the least digestible. The oil is most abundant in the "thin" parts of salmon, which are consequently preferred by epicures. After spawning, the quality is very inferior. In the cod, whiting, haddock, plaice, flounder, and turbot, there is no oil, except in their livers; so that these are easily digested, especially if they are not eaten with quantities of lobster or shrimp sauce, agreeable adjuncts, very apt to exact large compensation from the delicate in the shape of acidity and flatulence. Frying, of course, renders fish less digestible than boiling or broiling; and those whose digestions are delicate should avoid the skin of fried fish. They should also avoid dried, smoked, salted, and pickled fish; crabs, lobsters, prawns, and shrimps. The oyster is more digestible when raw, least so when stewed. Dr. Beaumont found the raw oyster took two hours and fifty-five minutes to digest, the roasted oyster 3.15, and the stewed 3.30. What is called "scalloping" gives oysters a delicious flavor, but the heat coagulates the albumen and hardens the fibrine, besides, the effect of heat on the butter in which they are cooked renders it very unfit for the delicate stomach.—*Lewis's Physiology of Common Life.*

FINE STRAWBERRIES.—Among the fine strawberries we have seen this summer, was a basket from the Messrs. BUNCE, of Westford, called the *Bunce Strawberry.* They were very large and rich. We understood Mr. Bunce to say that the plants which produce them came from the East Indies several years ago, and that he has continued them pure, and by careful cultivation has brought them to a state of high perfection.

LAMP LIGHTERS.—A subscriber to the *American Agriculturist* says: Uninjured straws of rye, oats and wheat, cut in lengths of about six inches, are valuable for lighting candles or lamps. Placed in a glass or other small vessel, on the mantel or shelf they are quite ornamental. The above may be valuable in districts where waste paper is scarce.

THE CLYDESDALE HORSE.

In the Report of the Secretary of the Massachusetts Board of Agriculture, for 1860, we find the cut of the Clydesdale Horse, which we present herewith, together with the description of the breed given by the Secretary. The Suffolk Punch, or English Cart Horse, has long held a great reputation as being the most powerful draught horse in the world. The Clydesdale seems to combine quickness of motion with great strength.

This horse has long been bred with great care and uniformity in that portion of Scotland which also enjoys the enviable reputation of producing the best dairy cattle in the world, namely, the counties of Ayr, Dumfries, Renfrew and Lanark. They derive their name from the river Clyde, which flows through Lanarkshire, where they are very numerous. This breed, like the Morgan, is the natural result of the peculiar circumstances of its location, and has been developed by a favorable combination of soil and climate with the necessities of an enterprising people. In this region, celebrated for its extensive coal mines and prosperous manufactures, as well as for its agricultural thrift, large numbers of powerful horses are constantly employed in hauling heavy freight, and the farmers have wisely and successfully endeavored to produce upon their own soil the animal best adapted to the work.

The Clydesdale horse is about sixteen hands in height, and weighs from twelve hundred to sixteen hundred pounds. The most common colors are black, brown, bay and gray. They are sufficiently spirited and courageous, but intelligent, willing, free from vice, and very true, steady pullers. Their heads are small and often beautiful, their necks arched, and their legs and feet remarkably good, being of excellent shape, substantial and durable. They are superior travellers, for large horses, and especially famous for their rapid walk, and being often handsome and stylish, they are frequently employed as carriage and stout saddle horses.

Professor Low, in his admirable work, "The Domesticated Animals of the British Islands," says: "The long stride characteristic of this breed is partly the result of conformation, and partly of habit and training; but, however produced, it adds greatly to the usefulness of the horses both on the road and in the fields. No such loads are known to be drawn at the same pace by any horses in the kingdom as in the single horse-carts of carriers and others in the west of Scotland; and in the labor of the fields these horses are found to combine activity with the physical strength required for draught."

On the whole, the Clydesdale horses seem to be as distinct a breed, and as peculiarly adapted to New England as are the Ayrshire cattle; and it is to be hoped that some of our wealthy breeders of horses will distinguish themselves, and benefit the country, by the importation of choice stallions and mares of this valuable stock.

ENGLISH TURNIPS.

This root probably contains less nutriment in proportion to its bulk, than any other; yet, from the facility with which it is cultivated, it is by no means undeserving of regard. If ten bushels of English turnips can be produced with less actual expenditure of time and capital than is requisite to produce one bushel of potatoes or carrots, the former is certainly the more profitable crop, as no one can doubt that the nutritive value of the former will, upon analysis, be found considerably greater than that of the latter.

On green sward, recently broken and properly prepared, especially if there is an application of some sort of alkaline matter, they do well; so rich crops have been produced on alluvial lands where the deposit was of a silicious description, intermixed with a slight percentage of aluminous earth. But the largest and finest crops we have ever seen were raised on land where the bushes had been recently cut and burned, and the land plowed quite shallow and sowed about the tenth of July. Advantage should be taken of a recent rain, when the seed should be sown, either broadcast or in drills, and slightly covered. If sown in drills, the labor is more at first, but less afterwards; they are more conveniently tended, and will probably produce a larger crop, than when sown broadcast.

The turnip is sowed in corn fields at the last hoeing, to good advantage; and we have not been able to see that it decreases this crop any, coming so late as it does in the season. On old lands that have long been cultivated, it rarely makes a remunerating crop, unless a considerable expense is incurred in the application of lime or ashes, which tend to drive away the worms, with which old land is infested, and which supply the peculiar nutriment which the turnip requires.

In England this turnip is generally fed off by sheep. The seed is sown, either broadcast, as with us, or in drills, and as soon as the crop approximates maturity, a portable fence is placed so as to divide a portion of the field from the remainder, and sheep are turned in to devour the crop, on the ground. When the turnips within the pale are all devoured, the fence is moved, and an additional section included, and so on until the entire crop is consumed. Two advantages are secured in this way, viz.: the labor of harvesting is obviated, and the labor of conveying manure to the field—by no means an insignificant consideration—saved. The best English mutton is made in this way.

When a farmer has a large flock of breeding ewes, probably the best vegetable he can cultivate for them is the English turnip. Fed to these animals during the last stages of gestation, and liberally for a week or so after parturition, the turnip appears to have a much more prompt and salutary effect in promoting the secretion of milk than the potato, without its physical properties. Before parturition, however, it should be fed but sparingly, as a large quantity would induce too copious a flow of milk, and tend to produce swelling and disease in the udder. Where turnips are given once or twice a day, even in small quantities, a free use of salt, or a mixture of salt and ashes—say one part of the former to two parts of the latter—is recommended.

In our climate, turnips could not be fed where they grew, later than November, but until the last of that month we think they might be fed advantageously in that way.

CHEMISTRY FOR THE MILLION.

Carbon, hydrogen, oxygen and *nitrogen* are regarded as *organic elements*, because entering largely into organized bodies—plants and animals. All the rest are considered as *inorganic elements*, because not found in organized bodies, except in small quantities—that which constitutes the ash when the vegetable or animal matter is burned; and it should be remembered—what we have before stated—that when an organized body perishes, its organic elements pass into the air and become a part of it, while the inorganic fall as ash, and become a part of the soil, and that whether the body be destroyed by the rapid process of combustion, or by the slow process of decay.

Very few of the above fifteen substances are ever seen in their pure, elementary state, except in the chemist's laboratory; and it is difficult for those who have not seen them to form a just conception of their properties. We have endeavored to give as good an idea of them as we could by mere description, because it is out of these that nature constructs those compounds with which we have to do in actual life—those which constitute the rocks, the soils, plants, animals, our own bodies, even, and all that we see about us.

If two elements combine with each other, they form what is called a *binary* (or two-fold) compound. Three elements combined, form a *ternary* (or three-fold) compound. But it seldom, or never happens, that three elements combine with each other directly. It is a general law of nature, that the elements combine first in pairs, and then these pairs combine with each other. If the warp for a piece of cloth be of cotton and wool, here are two substances. If the filling be of wool and flax, here again are two; but how many are there in the texture? Not four, but three, because one is common to the warp and the filling. So it is with chemical combinations;—sulphur and oxygen form sulphuric acid; oxygen and iron form oxide of iron; now put these two pairs together, and you have sulphate of iron, a ternary, or triple compound. If every farmer in North America, in addition to his practical skill, understood the nature of this one compound, as well as the chemist in his laboratory, it would be worth at least a hundred millions annually to the continent. Millions of acres, now almost useless, would soon be producing valuable crops, and the reclamation

would be at a trifling cost, compared with the value of the increased produce. It is so with a great many other compounds that either enrich or ruin the soil; if the practical farmer understood their nature, he and the whole country would feel the benefit. But can he understand them, and yet be industrious in the practice of his profession? We admit there is some difficulty. A shrewd, common-sense, and pretty intelligent farmer, once said to an editor in our hearing: "You tell us we should know a great deal, but we know nothing more for your telling us that." He was right. The agricultural press has been in fault. It has told the farmer that he should know everything, but has it helped him to know anything of the real science that underlies his practice? Certainly it has, and it has been of immense benefit to the farming interest. But, to our apprehension, it has not done the thing right end first. It has not begun at the beginning, and taught the rudiments of science, and defined its terms, and made itself understood—has not measured out its teachings to the wants of men, who are not students of all day long, but have to catch a little now and a little then, as opportunity occurs. We are resolved to reform in this respect, and the farmer, or the farmer's boy, or the farmer's wife or daughter, who will follow us in these articles, shall not have occasion to say that we have taught nothing practical, or within their reach. Bear with us in one or two more of these rudimentary articles (which we know are dry,) as they are absolutely necessary to a just understanding of what is to follow, and we will be as practical as you wish, will use no jaw-breaking terms that can possibly be avoided, and will come with our chemistry into your every day affairs, and it shall show you not only what sulphate of iron is, but why it sours the soil and how you may sweeten it; not that genial warmth and gentle motion with free access of air makes the "butter come," for you know that well enough, but why it does; nor that yeast makes the bread rise, for you know that better than we, but why; and so of other things both pleasing and profitable for you to know, but which, hitherto, have been known but to a few.—*American Farmer's Magazine.*

HINTS TO FARMERS.—Do not discourage a child by giving him a poor tool to use. It is cheaper to use a good tool yourself, no matter what the cost, than a poor one. Ditto for your child.

Money, like manure, to do much good must be well spread.

Always select the best seed of a crop you wish to raise. "Whatsoever you sow that shall you also reap."

A solution of whale oil soap will destoy the numerous insects that infest trees and shrubbery at this season of the year. Dissolve the soap in warm water, making "suds" of medium strength, and sprinkle the leaves with a syringe. This specific is sure death to the caterpillar, miller, and the army of ravagers that destroy the foliage. Now is the time for its application.

Systematic labor accomplishes far more than that without plan or order, and with more ease and success.

THE OLD GARRET.

Sarcastic people say that poets dwell in garrets, and simple people believe it. And others, neither sarcastic nor simple, send them up aloft, among the rubbish, just because they do not know what to do with them down stairs and "among folks," and so they class them under the head of rubbish, and consign them to that grand receptacle of dilapidated "have beens," and despised "used-to-be's"—the old garret.

The garret is to the other apartments of the homestead what the adverb is to the pedagogue in parsing; everything they do not know how to dispose of, is consigned to the list of adverbs. And it is for this precise reason that we love garrets; because they do contain the relics of the old and the past—souvenirs of other, and happier, and simpler times.

They have come to build houses now-a-day without garrets. Impious innovation!

You man of bronze, and "bearded like the pard," who would make people believe if you could, that you never were "a toddling, wee thing," that you never wore "a rifle-dress," jingled a rattle box with infinite delight; that you never had a mother, and that she never became an old woman, and wore caps and spectacles, and may be took snuff; go home once more, after all these years of absence, all booted and whiskered, and six feet high as you are, and let us go up stairs together, into the old-fashioned, spacious garret, that extends from gable to gable with its narrow, oval windows with a spider web of a sash, through which steals "a dim, religious light," upon a museum of things unnameable, that once figured below stairs, but were long since crowded out by the Vandal hand of these modern times.

The loose boards of the floor rattle somewhat as they used to do—don't they?—when beneath your little pattering feet they clattered aforetime, when of a rainy afternoon, "mother," wearied with many-tongued importunity, granted the "Let us go up garret and play." And play? Precious little of play have you had since, we dare warrant, with your looks of dignity and dreams of ambition.

Here we are now in the midst of the garret. The old barrel—shall we rummage it? Old files of newspapers, dusty, yellow, a little tattered! 'Tis the "*Columbian Star.*" How familiar the type looks! Howit reminds you of old times, when you looked over the edge of the counter with the "Letters or papers for father?" And these same *Stars*, just damp from the press, were carried one by one to the fireside, and perused and preserved as they ought to be. Stars? Damp? Ah! many a star has set since then, and many a new-turfed heap grown damp with rain that fell not from the clouds.

Dive deeper into the barrel. There! A bundle—up it comes in a cloud of dust. Old Almanacs, by all that is memorable! Almanacs, thin-leaved ledgers of time, going back to—let us see how far: 184–, 183–, 182–,—before our time—180–, when our mothers were children. And the day-book—how blotted and bleared with many records and many tears!

There, you have hit your head against that beam. Time was when you run to and fro beneath it, but you are nearer to it now, by more than the "altitude of a chopine." That beam is

strown with forgotten papers of seeds for next year's sowing; a distaff, with some few shreds of flax remaining, is thrust in a crevice of the rafters overhead; and tucked away, close under the eaves, is "the little wheel," that used to stand by the fire in times long gone. Its sweet, low song has ceased; and perhaps—perhaps she drew those flaxen threads—but never mind—you remember the line, don't you?

"Her wheel at rest, the matron charms no more."

Well, let that pass. Do you see that little craft careened in that dark corner? It was red once; it was the only casket in the house once, and contained a mother's jewels. The old red cradle, for all the world! And you occupied it once; ay, great as you are, it was your world once, and over it, the only horizon you beheld, bent the heaven of a mother's eyes, as you rocked in that little barque of love, on the hither shore of time—fast by a mother's love to a mother's heart.

And there, attached to two rafters, are the fragments of an untwisted rope. Do you remember it, and what it was for, and who fastened it there; 'Twas the children's swing. You are here, indeed, but where are Nelly and Charley? There hangs his little cap by that window, and there, the little red frock she used to wear. A crown is resting on his cherub brow, and her robes are spotless in the better land.

EXTRACTS AND REPLIES.

OVERFEEDING OF CATTLE.

I thank you for communicating to the public the sound views of the "Wilmington Farmer" as to "bedding of cattle." It is true there is no man among us better qualified to speak on this subject than Mr. Sheldon. For fifty years he has been employed in teaming, more or less, often having more than twenty yoke of oxen at a time—and surely he must be a dull scholar if he has not learned enough to make his opinion worthy of regard.

I was also struck with what he says of the "cattle disease" as being caused by "overfeeding." May not this term "overfeeding" prove to be a solution of the whole mystery. I do not personally know anything about Mr. Chenery's stable or manner of feeding—but do know he is one of those gentlemen who import animals from abroad without much regard to the expense; and it is not rash to presume he may feed them in the same manner. I think I should place more confidence in the opinion of Farmer Sheldon, than in all the fancy farmers within twenty miles of the city. A LOOKER-ON.

June 17, 1861.

SUPERPHOSPHATE AND WIRE WORMS.

I see that Josiah White in the last *Farmer* recommends superphosphate as a cure for the wire worm. I have a little experience to state, and would like an explanation. I bought three bags superphosphate, two of Coe's and one of Mapes'. The latter I put in the hill for corn on a reclaimed muck meadow. Not a worm was seen during the whole time of preparing the land for planting. In less than one week there were from five to fifteen worms in each hill. One or two full grown wire worms and the rest appeared to be youngsters, from one-fifth to one-half as large. They were all greedily devouring the corn. It came up pretty well, but it appears to fear the weather above, and is waiting. Please solve the problem. I used Coe's on dry upland with good effect. Was the worm in embryo in the "super," or did it attract the "varmints." Were they little wire worms, or were they a new species of imps? I can find only now and then one left, and they are small. GRANITE QUILL.

Weare, N. H., July 1, 1861.

P. S. I had almost forgotten to state that the worm alluded to above did not make his appearance in some one hundred hills manured with strong hog manure.

REMARKS.—Cannot solve your problem, Mr. Quill.

KIRBY'S AMERICAN HARVESTER.

As I have a farm to superintend, and wages are high, I obtained one of the Kirby American Harvesters as a mower, last season, on trial. I had a heavy piece of clover, badly lodged, which it seemed impossible to cut with a scythe. I put the two horse machine into it, which cut it all off smooth, greatly beyond my expectations. This year I have obtained one, as I cannot well get along without it. Being a constant reader of the *Farmer*, and seeing the Manny, the Woods and the Buckeye cracked up to the highest notch, I wish to say that I cannot well conceive of any mower doing the work better than the Kirby. Mr. Draper says in a few days after the trial the Buckeye received the first premium over at least six or eight other machines. Now, if I mistake not, the Kirby received the first premium as a combined machine at the Syracuse trial by the United States Agricultural Society, and for ingenious adaptation of cutter to uneven surfaces, at the Syracuse trial in 1857. S. H. WHITCOMB.

Marlboro' Depot, N. H., June, 1861.

HARD MILKING HEIFER.

I have a young cow, just come in, that shows every mark of making an excellent cow, only she milks very hard. I should be pleased if you, or your correspondents, would inform me if there is any remedy. FOSTER TAYLOR.

Williamsport, Pa., July, 1861.

REMARKS.—We do not know of a remedy. Who will reveal one?

APPEARANCE OF THE CROPS.

Grass promises well, especially on land liberally fertilized, though many fields are beginning to show the pinching operations of a want of moisture. For several days there have been indications of coming showers, all of which have passed by without rain; verifying the old adage, "all signs fail in a dry time." Many are now cutting their grass and making it in first rate order. Better cut too soon than too late,—"a stitch in time saves nine."

Corn and other hoed crops have a healthy aspect—though corn is not near as large as usual at this time. The moderate temperature has checked it. There has been scarcely a day

when the mercury has risen to 80°. Many crops are suffering from the ravages of insects, and the trees promise neither food for man or birds. Cherries none, peaches none, apples few and far between. How it is with wheat and other grains I have not observed. The curse of war is accompanied by the blasts of desolation.

July 1, 1861. ESSEX.

A GOOD DRAG RAKE.

Seeing an article in your paper of July 28, 1860, headed "Raking Made Easy" I had the curiosity to read it. It was concerning a Drag Rake manufactured by S. Heywood, Claremont, N. H. I procured one and find it as you recommend, worth five times the value of mowing machines, according to the amount invested in them.

Marlboro' Depot, N. H., June. S. H. W.

A FINE PAIR OF STEERS.

Squire Benson, Jr., of this town has a pair of yearling steers, which weigh 2300 pounds, and girt 6 ft. 3 in. They are of a dark red color with white spots mixed in. If any of your readers have a pair of steers better than these I should like to see them. A SUBSCRIBER.

Heath, June 25, 1861.

For the New England Farmer.

A WORD TO FARMERS.

Alas! that it should be found necessary by the Great Disposer of events, to send so dire a calamity upon us, as the storm of the 16th of the present month, in order to remind man of his Creator.

Each season we have sown in confidence, fully expecting to reap the fruits of our toil; many of us no doubt unmindful of Him who sendeth the rain and sunshine. In a few, short minutes how forcibly He hath shown us our weakness, and our dependence on another and a mightier arm than ours. Wind, rain and hail sent by His hand, have done their work of destruction, wherever they have swept along; as prostrated trees and ruined crops bear evidence.

Terrible! terrible was the scene, as frightened hearts and bloodless lips can testify; and may Heaven avert another such. And yet it is well; both just and proper. This world is not our home. "Here we have no continuing city," and 'tis meet that we should be reminded of another and a better. Yes, too much reliance is placed upon our own strength. Too much thought and time expended in laying up worldly treasure, unmindful, O, how unmindful, of that other "treasure in the Heavens." Our lands are cultivated, our homes adorned with pride, as if we fully expected to stay here forever. In fact, we live as if nothing was perishable, nothing fleeting! And must these things continue?

No, no; let us accept a lesson from the past, and strive for other and better things. Let us in future till the soil with prayerful hearts, expecting nothing of our own strength, but looking to our Father for the "seedtime and harvest." Then we may secure His blessing; then we may grow in grace, prosperous and happy.

Rhode Island, June 26, 1861. E. W.

A POOR MAN'S PLEASANT HOME IN THE COUNTRY.

We copy the following article from the *American Agriculturist*, published at New York, by ORANGE JUDD, Esq. It is conducted with ability, and probably receives as much labor in all its departments as any agricultural paper in the country. We find that, by preserving our copy of it, we have not extracted as we should be glad to from its pages. Hereafter we shall use the scissors upon it.

We hope any reader of the *Farmer*, who owns an acre of land, will read the article below attentively, as it may convince some that they already possess the means of *making a place of their own*, that will far outstrip that of Squire Cash, if they will but steadily apply a *little labor* and a *little money*, each year. Such is the true way to build up a place, because there is as much enjoyment in *producing* it, as can possibly be drawn from it when it is completed.

The first thing is to devise the *plan*, then how easy it is to plant a single tree, set two or three varieties of roses, a pæony, a bed of pinks, or complete a single walk or path in the course of spring or summer. All persons have taste for the beautiful, in some degree,—and no one is so dull as not to admire,—even if too much prejudiced to acknowledge it,—tasteful and attractive surroundings to a dwelling. All our farmers—the very poorest—can do something to break the fierce winds of winter and the scorching suns of summer from their house, and give it an air of neatness and comfort. Yet how many never set a tree, plant a rose, or climber, or shrub, but live on in barren sterility, through two or three generations! Thank you, Mr. Judd; your friend does honor to the name he bears.

It is a prevalent notion that a pleasant country residence must necessarily cost a great deal of money. As we have walked with visitors through the tastefully planted grounds of a certain neighbor, it has often amused and vexed us to hear the remark made, with a long drawn and half envious sigh, "Well, *rich* people can have such fine places, but we common folks must go without them." While the truth has been, that in most cases these grumblers were richer than the envied proprietor; they were richer, but lazier. This fine place cost the owner skillful industry, continued for many years, but not much outlay of money.

It has been our pleasure to visit lately another residence, in a neighboring county, which is the admiration of all who see it, yet which cost but little money, and is the property of an intelligent, hard-working mechanic. The pleasure it gave, and the good example it may afford to others, induce us to give a brief account of our visit:

On alighting at the gate of this gentleman's grounds, we were not struck by the grandeur of the house, or the pretension of the gate-way; by statues, vases, or ornamental structures of any

sort. None of these things were to be seen. The house was an old one, renovated and slightly modernized, with a porch on one side and a piazza on the other, and a little bow-window for plants. The fence was a simple paling, made and painted by the owner's own hands The lawn in front was not large, but it was indeed a lawn—smooth, closely shaven, and of the finest sort of grasses, and notwithstanding the prevailing drouth, quite green. The trees were well chosen specimens of their respective kinds, evergreens and deciduous, pleasantly intermingled. Mr. Brown, the proprietor, has a strong preference for native trees over foreign, and thinks it almost a test of one's patriotism to think as he does. He is very fond of raising trees from seed, and has a little nursery of all sorts of native seedlings, from which he transplants to different parts of his grounds as occasion requires.

One feature of Mr. B.'s planting attracted our particular attention, viz.: his management of groups. Some were open and wide-spreading, others as close and dense with undergrowth, as the wildest forest. Some were set on the outskirts, with low-branching trees and shrubs and vines, and the foliage was so closely interlaced down to the very ground that the eye could not penetrate it at all. On the margins, were piled boulders and broken masses of rocks, over which wild shrubs and vines clambered, giving the whole a very picturesque air. Gravel walks wound among these groups, frequently leading into the centre of them, where were rustic seats, on which the family or visitor could sit and enjoy siestas, shielded from the sun and from all observation. This was the wildness and seclusion of the forest, in the midst of a highly dressed lawn, and within three rods of Mr. B.'s parlor.

The spaces between these groups were kept mowed, and here and there were circular beds of flowers. For instance, we noticed one bed of crimson petunias side by side with one of pure white. Adjoining these ornamental grounds, but concealed by hedges, were the kitchen and fruit gardens, in which vegetables and the smaller fruits were growing in a healthful and vigorous manner that showed good care.

Leaving this part of the premises, Mr. B. conducted us along a carriage-road leading to a valley in the rear of his premises. Observing that this road was somewhat broken where it ran in a straight line, but smooth where it curved, Mr. B. said he had noticed the same thing, and had ready an explanation of it. Where the road was straight, the hinder wheels of his wagons (which were often heavy loaded) followed exactly in the tracks of the forward, and thereby deepened the rut; but where the road curved, the different wheels ran over different portions of the ground, and therefore did not cut any part badly. So in road-making, as in many other things, utility and beauty run in the same track.

Following this road, we were soon in the midst of a well-wooded valley, down which ran a stream broken by occasional rapids and waterfalls. At the foot of one of these falls, which was about twenty feet high, Mr. Brown had built one or two rude seats. From this point, we followed a path leading by a gentle ascent in various windings up the sides of a tree-covered hill, until we reached the top. This was not a gravel walk, but simply a wide wood-path, laid out by our host himself, and easily kept in order. This hill proved to be a ridge with several distinct eminences. On each of them the underbrush had been cleared up, and comfortable rustic seats built out of the trees and grape-vines of the surrounding forest. And now came a series of pleasant surprises. From one of these peaks, a view had been cut out through the woods in a southern direction, embracing a wide range of country, hills, valleys, streams, and scattered farm-houses. The landscape in every other direction was left purposely shut out from observation. After resting and enjoying ourselves awhile here, we followed the path down into the forest again, until ere long we turned and gained another summit. Here were home-made seats again, and another prospect, but in an entirely different direction. Before us in the distance, were two valleys converging, with their mill-streams, and factories, and villages. From this point, too, all other views were excluded. Off again, but in the direction of the valley, we followed our host's guidance among the trees, until we came upon a seat built close upon the brink of a precipice, from which all outward views were cut off by overhanging trees and wild vines, but from which on looking *downward*, almost under our feet, we saw the house and grounds of Mr. B., the repose and beauty of which were in striking contrast with the wild spot in which we were sitting. Could anything have been more charming! After enjoying this nook awhile, and listening to the musical tinkle of the stream below, we took up our line of march down into the valley, and thence to the house, where a dinner refreshed us after our long ramble.

Now, we venture to say that there are few places within fifty miles so attractive as this. Yet it was not the property of a rich man. Nearly all these improvements were made by the owner's skillful hands, with only a trifling outlay of money. They were made from time to time, at odd hours, as a means of recreation from other and harrassing pursuits, and all within the past seven years. It is true, Mr. Brown had a valley and a hill to work up such as few possess; but then he had also a quick eye, and a ready hand, and a stout will, which seldom fail to accomplish great results anywhere. The fact is, most persons are *too lazy* to effect much; and they are glad of the chance to yawn their complaint: "O, if I were only *rich*, I could have a fine place!" What such men as Mr. Brown have done with limited means, and in so short a time, others may do, if they only possess a like enthusiastic love of rural pursuits, a willingness to sacrifice some other common gratifications, if need be, and perhaps to sweat a little, in order to secure a desirable object.

RUTLAND COUNTY AGRICULTNRAL SOCIETY, VT.—This Society offers very liberal premiums for the present season, and means to make *progress* prominent among the farmers of the county. The officers are:—ALPHA H. POST, Rutland, President; J. M. KETCHUM, Sudbury, Vice President; HENRY CLARK, Poultney, Secretary; W. H. SMITH, Rutland, Cor. Sec.; ZIMRI HOWE, Castleton, Treasurer; HENRY W. LESTER, Rutland, Auditor.

THE WOOD MOWER.

The following letter was sent to Messrs. NOURSE & Co., Boston, who have handed it to us for publication. Our desire is to lay before the reader such information in relation to mowing machines as we consider reliable, but after doing this, advise all persons to witness the operation of different machines before purchasing. If a mower can be found so good as to be satisfactory, purchase it, and it will probably pay for itself before a better one is introduced.

There is much extravagant expression in the letters we receive in regard to most of the machines. There is no need of this. Each one has its particular merits, and the poorest of them has one or more excellent points which the *best* do not possess. One thing is certain—a great advance has been made within two years, so that any person desirous of calling a mowing machine to his aid can find one that will cut his grass easily, rapidly and cheaply, and one that will last for many years, with proper care.

Kennebunk, June 24, 1861.

NOURSE & Co.—Your copy of the *Farmer* was received and contents noticed, and also your letter of the 20th, requesting a report of the Wood Mower from me, which you shall have from experience. Having been the first purchaser of a mower in this vicinity, and that not meeting my expectations, I made up my mind not to make another purchase until I saw a mower that was of such draft and simplicity of construction that it could be managed by a boy and one horse, and do the mowing to my satisfaction, and the time has arrived; the Wood Mower being the one, and the only one as yet, that can do it easily with one horse unless he be a heavy and powerful one. I have had a trial of Ketchum, Alien, Manny, Buckeye and Wood Mowers, the Wood surpassing in every point, being handled as easily as a handcart, and so constructed that the knife bar will follow the surface where the knife bar of neither of the above can, and with two-thirds of the draft on the horse. I have had the trial with the above named, with the Buckeye in particular, that being the next best in my mind, but the Wood is so far in advance that it can never come in after trying the Wood.

I went to a mowing match last season with the Buckeye, with a little span of 850 horses on the Wood, against a span of 1100 horses that were trained to the Buckeye, mowing in all kinds of grass, both lodged, standing, and full of vines, and the Wood made the best work in rough ground and in lodged grass. The Buckeye came to vines in grass, and came to a stand, the driver bidding defiance to the Wood to cut his piece of vines. I took one of the little 850 horses, put him to the one-horse Wood machine, and cut his grass for him to the satisfaction of all present.

I will also state that the Wood Mower is a very strong machine. I have a mower that cut last season some two hundred acres, having run upwards of twenty days; that was run into stumps and rocks a number of times with such force as to bring the horses to a stand without breaking a thing; the only breaks during the season being three of the fingers, and the machine looks at present as though it had not worked two days. The Wood Mower, for ease in management, strength, durability and lightness of draft, is unsurpassed, as yet, by any invention in the shape of a mower. HENRY JORDAN.

THE CONNEMARA PEASANTRY.

On this day the country was more animated than usual. Flocks of country people proceeding to Clifden fair came down the mountains. In all the gaps the red petticoats shone and the gay head cloths fluttered. I saw in this short day more lovely faces, more powerful forms and more picturesque groups than I believe I saw during the whole of my Irish tour. So great is the beauty and strength of the Connemara peasants that even the unheard of misery they have endured since time immemorial, and still suffer in their wretched cabins, has not been able to destroy these qualities. In rain and storm, I grant, the unpleasant side is turned outward, and you only see their nakedness and want. But let the morning sun shine over them, and let the pleasant blue of their mountains surround them, then their graceful voluptuous limbs are extended, the black hair is loosed, and the brown eyes speak the language which the heart understands in all regions, and does not forget even in the utmost woe and the utter disfavor of existence. How many pictures of rich scenery and of peasants presented themselves to me this morning. It was a panorama in which you walk from glass to glass, to something ever fresh and ever more beautiful. The brown girls came down the hill-sides in flocks, carrying their shoes and stockings in their hands. Then they sat down by the waterfall by the wayside. They placed their pretty feet in the water and washed them, and left it to the sun to dry and warm them. After which the innocent children of the highlands put on their shoes and stockings, smoothed their hair, looked at their faces in the water mirror, and walked contentedly towards the delights of the fair.

And far on our journey, wherever there was water with a sunny patch of meadow near it, we saw similar groups in their gay dresses, not unlike the fairy beings with whom fancy populates every mountain stream. All at once I came to a scene which reminded me of dreamland. I had passed round the last spur of the hill, and expected new mountains, new heaths, new wildernesses. Instead of that, I stood suddenly, as if by magic, in the most delightful garden, in the pleasantest idyl, such as poets only dream, and legends describe. Almost a thousand feet above the sea, between lofty mountains, and after a tour through brown, foggy mist-land, full of gloomy mud-hovels, in which misery and hunger dwell, the wayfarer little suspecting it, suddenly finds himself surrounded by delicious small houses, like English cottages in flowery gardens. Balconies of green Connemara marble stand over the doors, and everything smells of mignonette. Gentle green hills limit the view on the land side; and on the other, ocean stretches out for an immeasurable distance, and between both, in the happy centre, are the houses of this pretty vil-

lage, and all produces the deepest of piety and morality. No beggars follow the new arrival; all the people who are visible seem happy and well to do, and neatly dressed children play in the sunshine of the broad street. — *Rodenberg's "Island of the Saints."*

TRAPPING A TIGER.

A still more ingenious mode of tiger-killing is that which is employed by the natives of Oude. They gather a number of the broad leaves of the *prauss* tree, which much resembles the sycamore, and having well besmeared them with a kind of bird-lime, they strew them in the animal's way, taking care to lay them with the prepared side uppermost. Let a tiger but put his paw on one of those innocent looking leaves, and his fate is settled. Finding the leaf stick to his paw, he shakes it, in order to rid himself of the nuisance, and finding that plan unsuccessful, he endeavors to attain his object by rubbing it against his face, thereby smearing the ropy bird-lime over his nose and eyes, and glueing the eyelids together. By this time he has probably trodden upon several more of the treacherous leaves, and is bewildered with the novel inconvenience; then he rolls on the ground, and rubs his head and face on the earth, in his efforts to get free. By so doing he only adds fresh bird-lime to his head, body and limbs, agglutinates his sleek fur together in unsightly tufts, and finishes by hoodwinking himself so thoroughly with leaves and bird-lime, that he lies floundering on the ground, tearing up the earth with his claws, uttering howls of rage and dismay, and exhausted by the impotent struggles in which he has been so long engaged. These cries are a signal to the authors of his misery, who run to the spot, armed with guns, bows and spears, and find no difficulty in dispatching their blind and wearied foe.—*Routledge's Illustrated Natural History, by Rev. J. G. Wood.*

Thinking and Farming.—A garden is like those pernicious machines we read of, every month, in the newspapers, which catch a man's coat-skirt, or his hand, and draw in his arm, his leg, and his whole body, to irresistible destruction. In an evil hour he pulled down his wall, and added a field to his homestead. No land is bad, but land is worse. If a man own land, the land owns him. Now let him leave home if he dare. Every tree and graft, every hill of melons, row of corn, or quickset hedge, all he has done, and all he means to do, stand in his way, like duns, when he would go out of his gate. The devotion to these vines and trees he finds poisonous. Long, free walks, a circuit of miles, free his brain, and serve his body. Long marches are no hardship to him. He believes he composes easily on the hills. But this pottering in a few square yards of garden is dispiriting and drivelling. The smell of the plants has drugged him, and robbed him of energy. He finds a catalepsy in his bones. He grows peevish and poor-spirited. The genius of reading and of gardening are antagonistic, like resinous and vitreous electricity. One is concentrative in sparks and shocks; the other is diffuse strength; so that each disqualifies its workman for the other duties.—*Emerson's "Conduct of Life."*

CLOVER BLOSSOMS.

There's a modest little blossom
Blooming closely to the ground,
While its wealth of sweetest perfume
Thrills through all the air around.
White and pure a field of clover,
In the sunny summer day,
Brings a calm my spirit over,
Sweet as music far away.

In the rich man's terraced garden
Many a fair exotic twines;
Many a gaily tinted flower
'Neath the glossy foliage shines.
By the poor man's lowly cottage,
Violets sweetest odors yield;
Yet I love the air of freedom
Blowing from a clover field.

Lilies in the valley growing,
Roses in their blushing pride,
These may wreath their regal beauty
Fitly for the youthful bride.
Laurel wreaths may suit the poet,
Forest flowers may lure the child;
I would only ask the clover,
Meek and modest, brave and mild.

Little cares my hardy flower,
Though the soil be poor and dry;
Blooming by the dusty wayside,
Blessing all who pass thereby,
Let me learn the gentle lesson,
Even in my lowly way,
Working bravely, like the clover
In the sultry summer day.

Whitewash.—A correspondent of the *Southern Rural Gentleman* gives the following recipe, with the remark that it is a little troublesome to prepare, but a half barrel of it will cover a great deal of surface, be nearly equal to paint, and cost but little.

Into a clean barrel put half a bushel of fresh or quick lime; pour on boiling water sufficient to cover it six inches; stir until well slaked; then pour on about twelve gallons of boiling water, and stir in; have ready two pounds of rice flour, boiled to a thin paste and stir in; add two and a half gallons of linseed oil, two pounds of blue vitriol, and two pounds of Spanish whiting —stir all in while the mixture is hot, and apply with a brush at your leisure.

If desirable, a beautiful cream color may be given by adding to the above wash three pounds of yellow ochre; or a good pearl or lead color by the addition of lamp, vine or ivory black. For fawn color, add four pounds of umber, one pound Indian red, one pound common lamp black. For common stone, add four pounds common or raw umber and two pounds of lamp black.

Speed of Circular Saws.—For a 22-inch saw, many good mechanics prefer a speed of 3,500 turns a minute, although from 2,250 to 2500 turns is a more common rate. The periphery of a 21-inch saw, making 3,500 turns a minute, travels at a speed of 19,250 feet or 3¾ miles a minute, and every 1-7 lb. of frictional resistance at the points of the teeth, at that speed, is equal to one horse power.

For the New England Farmer.

THE BIRDS OF NEW ENGLAND---No. 14.

FLYCATCHING WARBLERS.

American Redstart—Canada Flycatching Warbler—Hooded Warbler—Green Black-capped Warbler—Blue-Gray Flycatching Warbler.

In the *Philomelinæ*, the next and third subfamily that we meet with in the extensive family *Sylviadæ*, are ranged a small group of foreign species, arboreal in their habits, and remarkable for their melodious and powerful songs. The celebrated Nightingale (*Philomela luscinia*) of Europe is considered as the typical species of the group, which also includes the European Redstarts (*Phœnicurœ*,) the Aquatic Warblers (*Salicaria*,) &c.; but we having no species that properly ranks in this section, we immediately pass to

The true or typical Warbler, constituting the sub-family *Sylvianæ*. These are birds of minute size, extremely active, and chiefly arboreal and insectivorous in their habits, and forming an extensive group, many species exist in nearly all parts of the world; of course exhibiting a diversity of habits, and consequently of forms; thirty or more species are found to exist in New England. Those introduced in this number are quite aberrant from the typical form, and from their peculiar habits may well be termed the *Flycatching Warblers*. In the form of the bill, several of the species greatly resemble the Flycatchers, and by respectable ornithologists the first here described is still placed in *Muscicapa*, with the other American Flycatchers. In their habits, and in the markings of their plumage, they are closely allied to the Warblers, with which they are likewise classed.

The AMERICAN REDSTART, (*Setophaga ruticilla*, Swain.; *Muscicapa ruticilla*, Linn., Wilson, and many others,) is a minute, but truly beautiful species, generally diffused over the United States, and extends its migrations as far northward as the sixty-second parallel; but it does not appear to be very numerous. It winters in tropical America, and enters New England from the south early in May, when the throngs of summer birds begin to arrive, that

> "In busy tribes
> Pour their forgotten multitudes, and catch
> New life, new rapture, from the smile of spring;"

at which time they may be observed flitting continually among our thickets and woodlands, their brilliant tails expanded, and the males frequently uttering their short but sprightly and pleasing songs, as they pursue their insect prey. A few remain with us throughout the summer, placing their neatly formed nests, delicately lined with downy substances, in the forks of bushes or low trees, in which they lay four or five pure white eggs, sprinkled with dusky spots. In the wild, romantic, wooded glens of central Vermont, I have met with them much more frequently in summer than in this section; but as they are everywhere shy and retired, as well as scarce, frequenting the deepest thickets, and shunning the haunts of man, they are as yet but little known.

The length of the Redstart is five inches; extent six and a quarter. The adult males, in perfect plumage, have the head, neck, breast, and whole upper parts deep black, with glossy blue reflections; sides of the breast under surface of the wings, tail, except the two middle feathers and a terminal band of black, deep orange red; a band of orange at the base of the primaries and secondaries of the wings; belly, white. The female is pale greenish olive, where the male is black, and pale yellow where he is orange, except the aurora band on the wings, which she does not possess. The males are several years in acquiring their mature plumage, during the first and second years resembling the female, and gradually afterwards acquire the glowing colors of the perfect adult male.

The CANADA FLYCATCHING WARBLER, (*Setophaga Canadensis*, Swain.,) sometimes described as the *Canada Flycatcher* and *Spotted Canada Warbler*, like the preceding, is not a common species, and is occasionally found to be quite rare. It passes through this region on its northward journey about the 20th of May, (the present year between the 20th and 26th of May,) and proceeds far to the northward to breed. South of New England it seems to be a rare species, and is seldom observed below New York; Wilson remarks that he shot two in the interior of Pennsylvania, the only individuals he ever met with; and Audubon states that he never saw them below Philadelphia. During the last week of May, the present year, I met with more than a dozen individuals in Springfield.

In their habits they much resemble the Redstarts, and like them are continually in the pursuit of small winged insects. I observed one that had taken his stand over a pond of water, in which dry bushes were standing, dart from his perch at the passing insects, returning each time to the same bush, and often to the same twig, like the Pewee Flycatchers, uttering at intervals a short but lively and very pleasing song. The history of this species is still quite imperfect.

The Canada Flycatcher measures four and a half inches in length and eight in extent. Male, above, bluish gray, with a tinge of greenish olive on the back; crown, streaked with black; lores and around the eye, yellow; a patch of black below the eye connects with a band of black streaks that marks the breast; lower parts, deep yellow. A specimen before me, that proved by dissection to be a female, has all the colors much paler, entirely wanting the greenish patch on the back, which Dr. DeKay considers as a peculiar and distinguishing characteristic of the female, and has the black markings on the head and breast quite obscure. Of four or five males that I have recently examined, some had all the colors less deep and pure than others, but all had the greenish tinge on the back, and on some it was quite conspicuous.

Two species of a genus formed by Prince C. L. Bonaparte, of a few species detached from *Sylvicola*, and dedicated to the memory of the "great pioneer in American Ornithology," are here introduced, as they resemble the preceding in several important characteristics.

The HOODED WARBLER, (*Wilsonia mitrata*, Bonap.,) is an exceedingly rare species in New England, but it is probably found here, as its habitat is known to extend from Mexico to 52° north; but it seems to be rare to the northward of Maryland. In the Southern States it is abundant, and seems partial to low situations, where there is thick underwood; and in the thick cane-brakes,

along the Mississippi river, it is likewise said to be very common. It builds a compact nest in low bushes, laying therein about five grayish white eggs, marked with reddish spots near the greater end.

This species is five and a half inches in length, and eight in alar extent. Forehead, cheeks and chin, yellow; head, neck, and upper part of the breast, black; rest of the lower parts, yellow; back and tail, yellow olive. In the female, the black is of less extent, and not of so deep a tint.

The GREEN BLACK-CAPPED WARBLER, (*Wilsonia pusilla*, Bonap.,) was discovered by Wilson in the Southern States, and in the swamps of that section it sometimes spends the summer. It is an exceedingly active species, its habits being similar to those of the birds above described; its nest and eggs considerably resemble those of the Hooded Warbler. It passes through New England about the 15th of May on its way to the North, and proceeding to high boreal latitudes to incubate, has been observed to arrive at Labrador in June, and its nests have been found as high as the fifty-second parallel. On its return to tropical America to its winter quarters, it passes through our borders, and, as in its spring transit, makes but a short tarry with us.

The length of this beautiful species is four inches and a half; alar expanse, six and a half. A pair of these birds obtained the present season exhibit the following markings. Male, above green olive; crown, deep glossy black; forehead, space round the eyes, throat and lower parts, yellow, tinged with olive on the sides; wings and tail dusky tinged with olive. The female has the black patch on the head smaller, and quite indistinct, being skirted with olive, but otherwise does not essentially differ in color from the male.

The BLUE GRAY FLYCATCHING WARBLER, (*Culicivora cærulea*, Swain.,) or *Blue Gray Gnatcatcher* of some writers, winters in Mexico, and countries south of the United States; it is found in Louisiana at the middle of March, arrives in Pennsylvania about the middle of April, reaches New York and New England early in May, and has been observed as far north as the seventy-sixth parallel. It is not a numerous species, and in New England appears to be quite rare; it extends over the Western States, where it is not uncommonly met with. It is one of the least of our birds in size, but is exceeded by none in activity, being perpetually on the wing, seizing the minute winged insects that constitute its food, and is found to take large numbers of mosquitoes, and of various kinds of gnats. Wilson observes, "it darts about from one tree to another, with hanging wings and erect tail, making a feeble chirping *tsee, tsee*, no louder than a mouse. Though so small in itself, it is ambitious of hunting on the highest branches, and is seldom seen among the humbler thickets." It constructs its tiny nest of such perishable materials as the husks of buds, stems of old leaves, and down from the stalks of ferns, outwardly covered with gray lichen, and lined with a few horse hairs, the structure being often placed among the twigs of the tallest trees, sometimes fifty feet from the ground. Its eggs are pure white, with a few reddish brown dots at the larger end.

The length of this bird is four and a half inches; extent six and a half; color above, light bluish gray, bluest on the head; below, bluish white; tail, longer than the body, black, the exterior feathers nearly white.

CORRECTIONS. — WOOD THRUSH — YELLOW-BELLIED PEWEE.—In the article preceding the present, No. 13,) for *Crow* Blackbirds read *Cow* Blackbirds; in the number next preceding, for *tree* thrushes read *true* Thrushes.

In the first article on the Thrushes (No. 11,) a Thrush was mentioned that took up its residence in the most business part of the city, during the summer of 1860, whose wild woodland music rose above the sound of rattling vehicles and the noise of business—a welcome and refreshing strain to many a weary ear, suggesting to the listener secluded groves and woody solitudes, the natural haunts of that solitary, yet delightful musician, our favorite WOOD THRUSH. Remote from his accustomed haunts, this singular bird took up his retreat in the trees that adorn the public square, within a stone's throw of the City Hall and other public buildings of the city, surrounded by pavements and walls of brick, with scores of citizens passing and repassing continually beneath the trees from which he sung, and passed the season apparently happy and contented, wholly self-secluded from intercourse with his own species, and wholly unmolested by our good citizens. The present year he has again returned, occupying again the same trees and situations he frequented last summer, and is heartily welcomed by our people, as without fear of harm from man he pours out daily his melodious lays, and gathers his food from and near the walks where citizens pass continually. The "hospitalities of the city," as a friend has observed, are fully guaranteed to him, and accordingly a tyrannical Crow Blackbird that built her nest in one of the wide-spreading elms of the square, in May, was shot, by permission of the mayor, because she persisted in driving the musical, harmless Thrush from his favorite retreat. Such a strange departure of any bird from the general habits of its species, seems particularly deserving of notice; and especially in this case, where a bird, naturally remarkably shy of man, and selecting the most retired woody retreats for its home, voluntarily secludes himself entirely from his kind, courts intimacy with man, and leaves the quiet, umbrageous woodlands for opposite situations in the noisy city.

Not having the opportunity of seeing this Thrush last season, and judging in part from the representations of others, it was hinted in the former notice of this bird, that it might be the Olive-backed Thrush (*Turdus olivacea*, of Giraud,) a species that seems to be but little known. It proves, however, to be the genuine Wood Thrush (*Turdus mustelinus.*) The Olive-backed Thrush I have observed in considerable numbers in May; it seems to be the least suspicious of our four woodland Thrushes, occasionally frequenting gardens and orchards, and is often found in plowed fields that lie adjacent to woodland, searching for the larva of insects. Its song resembles considerably that of the common Veery, (*Turdus Wilsonii,*) but it is less loud, and I think it inferior to the song of that admirable minstrel.

In describing the Flycatcher, some time since, one species found in New England, but very little

known, was overlooked; it is the YELLOW-BELLIED PEWEE, (*Tyrannula flaviventus—Muscicapa flaviventus*, of Baird, discovered by S. F. BAIRD, on Long Island. It is closely allied to both the Little Pewee (*T. Acadica*) and the Wood Pewee, (*T. virens*,) being intermediate in size between the two, and by a casual observer might be mistaken for either. I met with several pairs in May of the present year, in this vicinity, always in the woodlands; its habits do not essentially differ from those of the Wood Pewee; and it doubtless breeds in this latitude. The color of the Yellow-bellied Pewee is a deep green olive above, the green being much stronger than in *T. Acadica*; beneath, pale lemon yellow, brightest on the belly, and elsewhere inclining to olive; ring surrounding the eye, yellow. J. A. A.

Springfield, July 4, 1861.

"TRABB'S BOY."

Every one, we think, will recognize the faithfulness to life of the following incident from Dickens' new story "Great Expectations." Mr. Pip was an apprentice of Joe, the blacksmith. He afterwards came into some money, and quitting his village, went up to London to complete his education, and study a profession. After a number of years, he has occasion to pass through the old village, and his appearance in the state and dignity of a gentleman excites natural indignation among those who knew him as a blacksmith's boy. Relating the story, he says:

It was interesting to be in the quiet old town once more, and it was not disagreeable to be here and there suddenly recognized and stared after. One or two of the tradespeople even darted out of their shops and went a little way down the street before me, that they might turn as if they had forgotten something, and pass me face to face—on which occasion I don't know whether they or I made the pretence; they of not doing it, or I of not seeing it. Still my position was a distinguished one, and I was not at all dissatisfied with it, until Fate threw me in the way of that unlimited miscreant, Trabb's boy.

Casting my eyes along the street at a certain point of my progress, I beheld Trabb's boy approaching, lashing himself with an empty blue bag. Deeming that a serene and unconscious contemplation of him would best beseem me, and would be most likely to quell his evil mind, I advanced with that expression of countenance, and was rather congratulating myself on my success, when suddenly the knees of Trabb's boy smote together, his hair uprose, his cap fell off, he trembled violently in every limb, staggered out into the road, and crying out to the police, "Hold me! I'm so frightened," feigned to be in a paroxysm of terror and contrition, occasioned by the dignity of my appearance. As I passed him his teeth loudly chattered in his head, and with every mark of extreme humiliation, he prostrated himself in the dust.

This was a hard thing to bear, but this was nothing. I had not advanced another two hundred yards, when, to my inexpressible terror, amazement and indignation, I again beheld Trabb's boy approaching. He was coming round a narrow corner. His blue bag was slung over his shoulder, honest industry beamed in his eyes, a determination to proceed to Trabb's with cheerful briskness was indicated in his gait. With a shock he became aware of me, and was severely visited as before; but this time his motion was rotary, and he staggered round and round me with knees afflicted, and with uplifted hands as if beseeching for mercy. His sufferings were hailed with the greatest joy by a knot of spectators, and I felt utterly confounded.

I had got as much further down the street as the post-office, when I again beheld Trabb's boy shooting round by a back way. This time he was entirely changed. He wore the blue bag in the manner of my great coat, and was strutting along the pavement towards me on the opposite side of the street, attended by a company of delighted young friends to whom he from time to time exclaimed, with a wave of his hand, "Don't know yah!" Words cannot state the amount of aggravation and injury wreaked upon me by Trabb's boy, when, passing abreast of me, he pulled up his shirt collar, twined his side hair, stuck his arm akimbo, and smirked extravagantly by, wriggling his elbows and body, and drawling to his attendants, "Don't know yah, don't know yah, 'pon my soul, don't know yah!" The disgrace attendant on his immediately afterward taking to crowing and pursuing me across the bridge with crows as from an exceedingly dejected fowl who had known me when I was a blacksmith, culminated the disgrace with which I left the town, and was, so to speak, ejected by it into the open country.

But unless I had taken the life of Trabb's boy on that occasion, I really do not even now see what I could have done save endure. To have struggled with him in the street, or to have exacted any lower recompense from him than his heart's best blood, would have been futile and degrading. Moreover, he was a boy whom no man could hurt; an invulnerable and dodging serpent who, when chased into a corner, flew out again between his captor's legs, scornfully yelping. I wrote, however, to Mr. Trabb by next day's post, to say that Mr. Pip must decline to deal further with one who could so far forget what he owed to the best interests of society, as to employ a boy who excited loathing in every respectable mind.

BLACK CURRANTS.—A correspondent of the Chicago *Farmer's Advocate* gives the following as the mode of growing black currants in some parts of England. The ground is planted at the ratio of 3000 plants to the acre. After the second year each alternate plant is cut down nearly to the ground; the following year it makes a vigorous growth, and the year after bears a full crop; when its fellow is cut down. The bushes are allowed to bear two years; consequently all bear one year, and one-half bear the next. For instance, those cut last fall bear in 1861 and 1862, and those cut this fall bear in 1862 and 1863.

TALL TIMOTHY.—The Cincinnati *Valley Farmer* has received from a friend heads of Timothy fifteen inches long.

THE BEECH TREE.

(FAGUS SYLVATICA.)

Few of the indigenous trees of this climate, of the deciduous class, are more valuable either for ornament or use, than the beech. In most of the New England States, it flourishes vigorously in its natural condition, often constituting extensive forests, where it is easily discriminated by its waved and rather oval leaves, and triangular fruit, consisting of two and three cells, enclosed by a husk covered with spines or simple prickles. No American tree endures better the violence of transplanting. The facility also with which it may be trained, so as to constitute long lines of lofty hedge, admirably designed to afford shelter during winter from cold and sweeping winds, render it a most desirable acquisition to the husbandman, in exalted regions, as well also as to the amateur farmer and the man of taste.

The fruit of the beech is another persuasive argument in its favor. This, which is called "*mast*," by some, usually falls with the second or third heavy frost. It is very palatable and nutritious; although if taken in excess, it will produce nausea and vertigo or giddiness. In a dried and ground state, it is highly alimentary, and can be made into excellent bread. The inhabitants of one of the Ionian Isles, Scio, we think, are said to have been enabled to withstand a memorable siege, simply by the sustenance afforded them by the mast of the *fagus sylvatica*—a tree indigenous in Scio, as probably in most of the Ionian groups. The fruit, roasted and prepared as coffee, is said to possess a highly delicious and fragrant flavor, superior in point of richness and mildness to the best Mocha. The nut yields also a sweet and bland oil, which may be expressed by the simplest machinery, requiring only the application of a moderate pressure for its expression. When extracted, it may be used as a substitute for butter, olive oil, &c.; and in this way we have the attestation of the press and of travellers, that it is extensively used in Silesia, as well as in several other lands. In some countries the foliage, as well as the nuts, is economized; the leaves are gathered from the trees in the autumn, before the disorganizing effects of frost have operated on their vitality, and applied as materials for beds and mattresses—being preferable for this purpose, to hay, straw or chaff—and as food for cattle.

But these beautiful trees are, like the pine, the maple, and the other native trees, rapidly disappearing from among us, in the same way that forests have disappeared in other countries. "France," said M. Thuan, "will disappear as many flourishing countries have, if she does not follow the example of Cyrus, who planted forests in Asia Minor. It is only the abundance of forests and water that enables China to support her 300,000,000 of inhabitants, because in this empire there are more trees planted than destroyed. Spain, so densely populated, and so highly cultivated at the time of the Romans, Moors and Charles the Fifth, owes her desolate aspect at present, to this waste of wood." So it will be with any country, when no trees are planted to supply the place of those destroyed.

For the New England Farmer.

WHY DON'T THE SEED VEGETATE?

Perhaps you dealt with a dishonest or careless seedsman, who sold you seed which had lost its vitality, and hence could not vegetate; or perhaps, which is more probable, you did not develop the vitality which was in the seed. It may be you planted it just deep enough for ordinary weather, but too deep, as it proved, for the cold, wet weather that succeeded your planting; and hence the seed rotted in the earth; or, again, too shallow for the hot, dry spell that followed. I planted nearly five thousand hills of the Mason cabbage about the 20th of June, and the seed in but about fifty hills have vegetated. "He was a rascal that sold me that seed for a fresh article," I might have said, but the fact was, I raised the seed myself, and knew it to be both fresh and of first rate quality; of course, then, I magnanimously spared the lash. The truth is, the surface soil has become too dry since the seed was planted to supply it with sufficient moisture. When the rain comes, if meanwhile the dry earth is not blown away sufficiently to lay the seed bare, I presume, when too late in the day to be of any value, the young plants may deign to show themselves. I must clap some pickling cucumbers or fall turnips into the piece.

Again, there is my thrifty neighbor Goodwin. Early in the spring he planted cabbage seed of his own raising, of the growth of the year previous, as fresh and plump seed as you would wish to see. Well, his seed, for some reason, metaphysical, hygienic, or otherwise, refused to vegetate; many of us believe that with the cold, wet season of early spring, it rotted in the ground. I warrant you, he dosn't lash the back of that seed-raiser very hard, because of the failure. The truth is, while every seed-dealer is bound to deal honestly and honorably with the community in the freshness and soundness and genuineness of the seed he sends into the market, yet, as in the course of Providence, up to the present date, he is not permitted to sell with the seed, control in full of all the laws which govern germination, an occasional failure, and consequent disappointment, always to be regretted, may occasionally be expected. J. J. H. GREGORY.

Marblehead, Mass., July 1, 1861.

AN ENGLISH TASTE.—Mr. Tucker, in one of his letters to the *Country Gentleman*, thus speaks of the English ambition:

"People in these manufacturing villages are exceedingly fond of getting a piece of land of their own. It helps them perhaps in the keep of a

cow or the production of vegetables, while—most important of all—the possession of a forty-shilling freehold gives them a vote. To attain this end they will hoard their savings until a sum of five, ten, fifteen or twenty-five hundred dollars is attained at immense labor and at the almost entire sacrifice of all interest upon it while it is in the process of accumulation, and receiving when finally the purchase is completed scarcely any—satisfied at the outside with two and a half per cent."

ON THE CROSS-ROAD BY THE MILL.

BY B. H. KINNEY.

On the cross-road, by the Mill,
Where the turnpike crosses eastward,
Down the gently sloping hill,
To the river running westward,
By the cross-road and the Mill,
Stood a farmer's humble cottage,—
And the cot is standing still,
Cherished with a sacred dotage.

There a sturdy yeoman dwelling,
Tilled the stern New England soil:
Gaining by his generous tilling,
Scanty harvests for the toil:
While his gentle housewife, moving
Like the river deep and still,
Trained their little brood for loving,
In the cottage near the Mill.

Thus along *life's* cross-road, leading
To the portals of the sky,
Nature's sacred volume reading,
Passed this ancient couple by;
At the time of ripened harvest,
That the heavenly garners fill,
With the ones who travel farthest,
On life's cross-road by the Mill.

Worcester, June, 1861. *Palladium.*

AN OLD FIELD.—A correspondent of the *Northern New-Yorker and Saratoga Farmer*, makes the following statement of corn growing on a piece of land in the town of Johnsburgh, N. Y., near Lake George. We copy it for the especial benefit of lazy, shiftless farmers; and would advise all such to emigrate to the aforesaid Johnsburgh, as soon as may be.

"Of corn Mr. Wm. Scripter has raised, father and son, from the same piece of land, a crop since 1810, or for fifty years successively, and without the aid of manure, ashes or plaster! Can this be beat? He says he has never changed his seed, and has a fair crop this year. His land is a gravelly loam, filled with cobble stone."

THE BARK LOUSE.—In reply to a correspondent who inquires for a remedy, the editor of the *Rural New-Yorker* says the bark louse is a difficult insect to get rid of. After mentioning applications of soft soap, tar and linseed oil (?) and a strong lye of tobacco, he adds that a gentleman in the Western part of the State wrote to him last season that he had entirely rid his orchard of this pest by simply throwing unleached ashes over the branches and trunk when wet. Care must be used that the ashes do not touch the leaves. The best time for this operation would be early in the spring, before the buds push.

For the New England Farmer.

THE VALUE OF HEALTH, MORE THAN WEALTH.

MESSRS. EDITORS:—Our happiness in this life depends more upon good health, and a conscience "void of offence," than every other circumstance. What enjoyment can a diseased hypochondriac have, unless he enjoys annoying his friends with a detailed catalogue of his miserable feelings. The causes for dyspepsia are numerous, some of which will be mentioned further along. A dyspeptic suffers physically and mentally; he is incapable of enjoying happiness in this life, or, seemingly, fitting himself for future happiness; if his morals and religious creed have been of the most approved kind, his gloomy mind bodes his future destiny as one least hopeful and most to be dreaded. Few who enjoy good health, realize the value of it. Money is no equivalent, or substitute for health, as many rich sufferers can testify. There are many causes for prolonged chronic disease; overaction and inaction produce nearly the same results, while well-adjusted labor is conducive to health. Excessive labor debilitates the system, and is followed by a train of morbid derangements which unfit a man for the enjoyments of social life. Headlong overdoing is the sin of the age; it not only produces a deranged state of the stomach, but a deranged state of finance. In what was pronounced "good times," thousands of mechanics worked themselves into dyspepsia for the purpose of earning extra pay; now the result of that overdoing is plain to be seen in the prostration of business, and bankruptcy of merchants. If men will do twenty years' business in ten years, they may expect an abridgment of labor and life accordingly.

Every man is limited to perform a certain amount of labor, and then is done. Some farmers, like other folks, have a great desire to accumulate property. Industry merits the highest commendation, but overworking is sure to produce sickness, melancholy and regret. I have known farmers doing a snug business, clear of debt, a little money on hand, and living happily in their families, suddenly seized with the land fever, on a farm being for sale in the neighborhood, make the highest bid, and at the same time bid adieu to all comfort, involve themselves in debt, multiply the labors and cares of the household department, disgust their sons by additional labor to such an extent, that they leave for the city in hopes to find relief, delve for a few years, when they yield themselves an easy prey to old age, and death, and their hard-earned property is distributed to greedy city and other relatives, as a lucky morsel. Inaction does not always imply laziness.

Those who live sedentary lives are often the most industrious portion of our population, but still, there is a degree of inaction in a part of the muscular and organic system, which is detrimental to health. Children that are confined at school the year around, often suffer from the effects of confinement; lassitude takes the place of action, and a little exercise produces fatigue till a disinclination to action predominates, and a poor appetite and debility follows. Children designed for trades or any kind of labor, females not excepted, would form more vigorous constitutions,

if instructed in some useful trade or employment six months in the year. According to retrospective observation, I am convinced that six months schooling in the year is better than twelve, for the majority of children. They become disgusted at being driven to school daily, and after a while lose their interest for study, which becomes a drudgery, and grow idle, and would rather do any thing than go to school. But circumstances alter cases; out of two evils we ought to select the least. In cities and villages, where children have nothing to do but perplex their parents, or expose their lives in rambling the streets, confinement to the school-house may prove the lesser evil. Children have an intense desire for action, which will result in good or evil. "As the twig is bent, the tree is inclined."

I have often thought of the great disproportion between the natural life of man, and the years spent to acquire a fashionable education. Our young men spend something like nine or ten years (after attending district schools,) to qualify themselves for the several professions, at great expense of money and deterioration of physical energy. These nine years consume the most important period during the life of man. A great proportion of professional men find themselves in the neighborhood of 25 or 30 years of age, before they have gone through all the formalities demanded by custom to qualify them for the desk, bar or saddle-bags. In this protracted course of study, or sedentary inaction, the physical powers must suffer, and the mental of course must sympathize with them, and many a man has commenced his profession with a shattered constitution. Intellects that cannot be scoured up in less time than nine years to fit a man for a profession, would be better adapted to some other calling.

In the latter part of the last century, the clergy in this vicinity were strong, muscular men; they could build stone wall and preach a sermon three-fourths of an hour long, or, till every member of the assembly were ready and happy to chime in the Amen. More of them had served their country in the war of the revolution than went to Enrope to regain lost health. Some of them would work on the "Parsonage" three days in a week, and give us two stentorian sermons on the Sabbath not easily forgotton. These men were not of the locomotive kind, but lived and sympathized with their parishioners, in prosperity and adversity.

SILAS BROWN.

North Wilmington, July, 1861.

BEGIN SMALL.—Such is the advice of the *California Culturist* to those who are going into the sheep-raising business in that State. After mentioning an instance of individual success, in which the money invested in a small way was doubled in six months, including the shearing season, of course, other instances are spoken of as follows:

We have met with capitalists who have invested largely in sheep, some of them buying their five, ten or twenty thousand head at the commencement, thinking they could make it pay, in accordance with the extraordinary increase known to attend this valuable animal in California. Most of these persons, thus purchasing largely, have failed to meet their anticipations, and in no long time, have been found selling off their large flocks in small parcels, as they could best find purchasers. This exactly demonstrates what has long been an admitted principle of business, that if you would achieve eminent success, it must have its commencement from small beginnings; because, in the small business of an enterprise, one becomes thoroughly acquainted with all those minute details which qualify for the successful management of those of increasing dimensions.

THE TIME TO CUT TIMBER.

MESSRS. EDITORS:—In a recent number of the *Scientific American*, under the head of "Useful Information about Timber," I find a statement in direct opposition to the theory received among wood-cutters, in regard to the best time for felling timber. It is there stated that this is when the wood contains the *least sap*, in whatever part of the year this may take place. The result of my observation is, that the month of August is the best period to cut timber for mechanical purposes, just when the leaf is full, or has attained its growth, at which time the tree has certainly the greatest amount of sap in it. I have found that the timber cut at this period is perfectly solid, sap-wood, and all, and that it is also free from worms. Timber cut upon the same ground during other months of the year is quite porous, and has the sap wood entirely eaten off, when undergoing the same process in drying. I was led to believe that the abundance of sap in August closed the pores of the wood and solidified the timber. If my philosophy is wrong, there are quite a number of your patrons in this place interested in the subject, and who wish to hear more about it. THOMAS HARPER.

Alleghany City, Pa., Jan., 1859.

There seems to be a misapprehension of the idea expressed on page 154 of the present volume of the *Scientific American*, in regard to the best period for cutting timber. It is there stated that in New England, August is held to be the best month of the year, as at that period the *sap is exhausted* in forming the leaves, and the new wood and the trunk are then much drier. This language is in accordance with the opinions of our correspondent. In reference to the term *least sap*, perhaps the matter would be rendered more clear to have said the least *free* sap. In the month of August, according to our correspondent, the sap becomes solid, and fills up all the pores of the wood, consequently it is not *free*—not exactly sap at that period. In other States, further south, July is the month most favorable for cutting timber.—*Scientific American.*

TRUE COLORS.—The Ohio *Cultivator*, in noticing the election of a president of an "institution at College Hill" called Farmer's College, advises the managers to complete the work of reform, by abolishing the cheat of a false name, and placing it before the public in its appropriate sphere, as a first rate Classical and Literary Institute.

For the New England Farmer.

HAY-MAKING—PLANTING ON GREEN SWARD.

MR. EDITOR:—I was much pleased in the perusal of your editorial of June 22d, on "Grass and Hay Making," particularly in the reference to curing hay in cock, rather than by wasting labor, exposing the article to showers, and injuring its quality and quantity under a burning sun. A fine field of clover near by, was cut on Monday, cocked on Tuesday, stood until Wednesday week, about 9 days, then opened in flakes, or six forks to a cock, carted and mowed, and a bushel basket would hold the heads and leaves that fell off. Its appearance was as fine as when cut, and the labor expended trifling in amount.

The "New Mode of Planting on Green Sward" I remember to have seen recommended in a farmer's manual, about 40 years ago. I tried it then and since, and think well of it. In 1848 or '49, while superintending the manufacture of the Prouty & Mears plow, at South Boston, a gentleman from Vermont visited my family; he spoke of that practice being successfully adopted in his neighborhood, viz.: spreading manure, lopping up back-furrows in sward, planting the top of ridges—but he said there was difficulty in laying the last furrow, with a common plow, and wished he could have one to lay up the two at once. I told him he could have it, made the pattern, built the plow, proved it, and found it all right, forwarded it to him and received the cash, the plow being satisfactory. Hundreds have been built since for home and Cuba market. They may now be had of Messrs. Nourse, Mason & Co., Boston, under the name of "Prouty & Mears Midland Plow"—that is the true Centre Draft Plow, *drawing* from the *centre* of opposing forces—doing its work equally on each side—as truly as the *centre* of *gravity* of a plum-bob is supported by the line by which it is suspended. The interest of the farming community would be advanced by a better acquaintance with *that plow*, and its general introduction.

JOHN MEARS,
The Old Plow Maker.

South Abington, July 5, 1861.

REMARKS.—We are glad to hear from this veteran plow-maker, and especially so to find him approving our suggestions. Mr. Mears has been a public benefactor—long may he live in the enjoyment of his well-earned fame.

DITCHING WITH A PLOW.

It is often said that, "where there's a will, there's a way;" and if American farmers have a will to drain off the superfluous water from their farms, there can be little doubt that they will find, or make a way, to do so. The following experiment in the ditching line by a New Hampshire farmer is reported in the *Journal of Agriculture:*

In the first place, I plow two furrows, and throw them out; this makes the ditch wide enough at top. I then plow two more and throw them out. The ditch is then twelve or fifteen inches deep, and one ox can no longer walk in it with the other on the surface. I then take a stout-piece of timber, say five or six inches square, (a round stick would do as well) and twelve or fifteen feet long. I then lay it across the ditch and hitch a yoke of oxen on each end, so that the timber serves as a long whiffletree, with the plow chained in the middle; and as the ditch grows deeper, the chain is let out longer. In this way, there would be no trouble in plowing six feet deep. The only difficulty is, in keeping the oxen nearly abreast; as it is new work for them. But by taking light furrows at first, they soon learn. I use for this purpose one of the iron beam, "Washington" plows, as they are called, made, I believe, in Concord. It requires a new point, or one as good as new. After running the plow through two or three times, throw out the loose earth and plow again.

EXTRACTS AND REPLIES.

CATTLE CHEWING BONES.

Can you tell me, through your paper, the cause of cattle gnawing the fences, barns, and every old board that they can find, bones, old leather, &c.? My cattle have done so for the last six months, and I know not what to do for them; they lose their flesh, and their eyes look bad. Any information in regard to it would be gratefully received.

GRANTHAM.

Grantham, N. H., July, 1861.

REMARKS.—When cattle are found chewing such substances as you mention, they have an appetite occasioned by the want of some substance which the system needs for its full and healthy development. When cows have long fed upon the same pastures, the food they get there lacks some important elements that they must have, or become sick, and when they are found chewing bones, it is evident that something is lacking. In such cases they should have, first, all the salt they will eat; then collect all the bones you can find, put them in the hot stove oven until they are thoroughly dry and become brittle, then pound them as fine as meal if you can, and lay before the animals. If they refuse to eat it in that form, mix a little with meal and feed in that form. The animals need phosphate of lime and other bone-forming materials, of which, by constant cropping, the fields and pastures have become greatly exhausted. Bone-meal may be purchased at the agricultural warehouses in any quantity.

BUCK CHAMPION OF VERMONT.

MR. H. T. Bucklin, of Sudbury, Vt., recently attended a shearing in the State of Ohio, with his famous Buck Champion, of Vt., which sheared 30 pounds of wool, (being less than one year's growth.) His carcass weighed, after being shorn, 105 pounds, giving him a pound of wool to 3½ pounds of carcass. His blood is pure Spanish merino. The sheep and fleece are on exhibition at his residence in Sudbury.

A SUBSCRIBER.

Brandon, Vt., July 8, 1861.

SCIONS—CROPS IN ILLINOIS.

I notice in your April or May number of the *Farmer* that a Mr. S. A. Shurtleff offers to furnish scions of certain sweet apples, but does not give his address sufficient to enable us to send for them. You will oblige me very much by giving it in full.

The prospect for farmers is very good. Wheat is nearly ripe, the yield and quality of grain will be very good. Of corn, there is more than usual planted, and owing to a dry June it has been very easily kept clean. A good crop is almost certain. Other crops look well, except meadows which were all injured, and a good deal entirely destroyed by the army worm. Of hogs, there is about the usual number, but will make a better average than common. Fruit is promising—we have had plenty of cherries for some weeks, and will have for weeks to come. Apple trees are about full enough and peaches are overloaded. WM. CUTTER.

Beverly, Adams Co., Illinois.

REMARKS.—Excellent, this is a cheering letter. Dr. S. A. Shurtleff, Brookline, Mass., is the address you inquired for.

—

THE CROPS.

After one week's scorching sun, ranging every afternoon in the shade, from 83° to 95°, we have been favored with refreshing showers of rain, last evening and this morning. Our hay crop is decidedly good, and has been cured in the very best manner. Indian corn looks vigorous and luxuriant, and is now growing splendidly. How it is with wheat and other English grains, I have not noticed, but have no reason to think there will be any deficiency in those crops. Fruits of all kinds, excepting strawberries, are likely to fail. I have never known strawberries better than this season. On the whole, there is every reason to bless God that our lines have fallen to us under such favorable auspices. J. W. P.

July 10, 1861.

N. B.—I went out this afternoon to look at the fields of onions—found them few and far between. On inquiry for the destroyer, found that he had not failed to appear, and that *the specific remedies* that have been recommended find no favor with sensible men.

—

HOW TO RAISE CREAM IN HOT WEATHER.

Allow me to suggest to the readers of the *Farmer* a simple method of management to raise good cream in hot weather; it will cost nothing, and is simply the following: Milk in tin pails, and after milking set the pails into a tub of cold water ten or fifteen minutes—stir it in the mean time, occasionally, before straining off. I have tried it for years, with good success. S. BYINGTON.

Stockbridge, July 8, 1861.

CABBAGE FOR FODDER.—There is no vegetable that can be planted after the first of July that will give so great a yield of fodder as cabbages; and no one who is likely to be short of pasturage, or winter feed, should neglect this highly important adjunct to his other crops. The notion that cabbages should only be grown by the dozen, for cooking in the kitchen, is an old and we may add a foolish one. Grow them by the thousand, and after pasture fails, feed them from where they are growing to every domestic animal on the farm. When the ground freezes, pull up your cabbage crop and store it in the cellar, or the barn, or under straw, until you can feed it out.

For the New England Farmer.

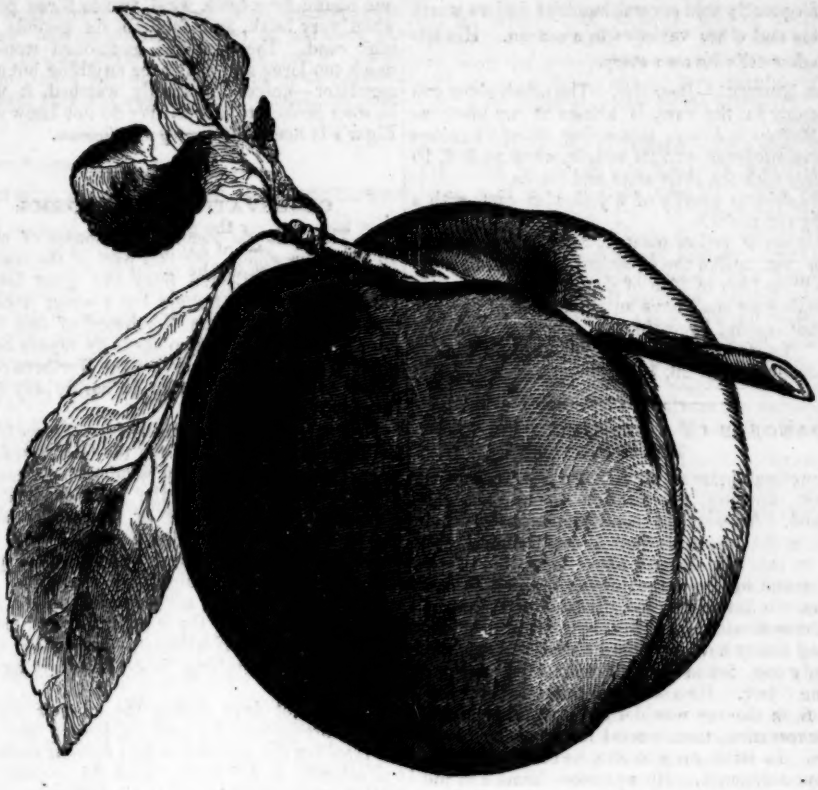
INFLUENCE OF THE MOON ON TIMBER.

On looking over the pages of the *Monthly Farmer* for July, just at hand, I perceived remarks on the "influence of the moon on cutting of timber," &c. The moon has so long been loaded with absurdities about "the cutting of timber," "the growing of crops," the bringing into the world calves, pigs and children, and hundreds of other things, that it is time she was vindicated from such slanderous abuses. This brings to mind a conversation I once heard, where a large number of persons were present, and the venerable TIMOTHY PICKERING, of Salem, was of the number. One of these gentleman, a captain of Rowley, had been explaining the importance of having regard to the size and position of the moon, when timber was cut, saying that he had followed the business of cutting such timber, and taking it to market for many years, and knew whereof he affirmed, and this he did with marked emphasis, it being after eleven o'clock in the day, those being times when this hour of eleven was duly regarded by many men, especially when they were at the tavern. Says the old gentleman, Pickering, rising with all the dignity at his command, "My good friend, I beg of you never again to introduce the moon, as having an influence on the quality of timber, where I am present. I have lived more than eighty years, and seen much of the world, and I can assure you, she has no more to do with it, than the 'man in the moon.'" The brave captain was silent, and said no more.

July 9, 1861. J. W. PROCTOR.

LARGE FRUIT FARM.—The *Gardener's Monthly*, of Philadelphia, gives an account of the Rev. J. Knox's fruit farm in Pittsburg. Fifty acres are planted with strawberries, ten with raspberries, ten with blackberries, seventeen with peaches, ten with apples, and three with grapes, &c. The ground for strawberries is abundantly enriched, and to give some idea of the amount of labor expended on this fruit, it is stated that in springtime over one hundred persons are employed on the grounds at one time.

N. H. JOURNAL OF AGRICULTURE.—W. H. GILMORE, Esq., has sold his interest in the *New Hampshire Journal of Agriculture*, to F. B. EATON, Esq., who will control the journal hereafter. Mr. Eaton says,—"We come to this work with an earnest purpose and conscious desire to make it worthy of support." We wish these qualities success, and hope the *Journal* will merit a most liberal patronage. We welcome brother Eaton into the corps and the good cause.



THE MAMMOTH PEACH.

We have never yet found a person who did not like the peach. It is a universal favorite, and, fortunately, is, at the same time, a healthful and nutritious fruit. It is not a native of our country, nor was it introduced here until long after some of the towns in the vicinity of Boston were settled. It is a native of both Persia and China, and has been raised in New England now about two hundred years.

For many years, our climate, both in New England and the Middle States, seemed admirably adapted to the peach, and larger quantities of it were raised than were probably ever produced any where else. Delicious as they were, they became so common that all our people either had access to them on their own grounds, or they were so cheap as to be within their limited means to purchase. Acres, by hundreds, were planted with them in the Middle States, so that not only their own large cities were bountifully supplied, but those of the North also, in the most liberal manner. Indeed, they were not only eaten freely during the season of their ripening, but were preserved in large quantities, and became one of the most common and delicious condiments of the table. The quince seemed to be supplanted by them, and although used in some degree, lost that place of pre-eminence, as a preserve, which it had long sustained.

For several years past, the peach tree has been undergoing a gradual process of decay, and no art of the chemist, or skill of the gardener, has been able to arrest it. A disease, known as *"The Yellows,"* has cut off thousands of acres in the Middle States. The same disease has also been prevalent in New England, and although its power to destroy, as in the States farther South, has not been so rapid, it has at last proved equally fatal. Five years ago, there were many flourishing peach-orchards in New England; now we are not aware that there is one!

There were many varieties of the peach, possessing various merits. They ripened, also, at different times in the course of several weeks between the last of July and the last of October. Some of them grew into a magnificent size, as is represented by the illustration which we give above. This peach was raised in the grounds of

Trumbull Bull, Esq., in Harvard, Mass., who has frequently sold several hundred dollars worth of this and other varieties in a season. His letter below tells its own story.

Mr. Brown:—*Dear Sir*,—The peach given you yesterday in the cars, is known at my place as the *Mammoth Peach*, measuring about 9¼ inches in circumference, and its weight, when picked, 10 ounces, with the little stem and leaves.

The skin is usually of a yellowish cast, with a bright red cheek.

It is quite yellow-meated, very juicy, and in flavor not unlike the Crawford. Freestone; ripens from 15th to 30th of September.

Hoping we shall have an abundance of peaches another season, I remain,

Yours in haste. Trumbull Bull.

Harvard, Sept. 26, 1860.

DANGERS OF CHECKING PERSPIRATION.

A medical journal publishes a severe caution against allowing perspiration to be suddenly checked. All who are condemned to "eat their bread in the sweat of their brows" should give heed to this advice. As one illustration of the evils resulting from the practice which it condemns, the following case, divested of technicalities, may be cited: A Boston merchant having worked pretty hard on board one of his ships on a windy day, found himself exhausted and perspiring freely. He sat down to rest. The cool wind from the sea was delightful, and engaging in conversation, time passed faster than he was aware. In attempting to rise, he could not do so without assistance. He was taken home and put to bed, where he remained two years, and for a long time could only hobble about on a crutch. Such exposures frequently result in inflammation of the lungs, pneumonia, ending in death in less than a week, or tedious rheumatic affections. Multitudes of lives would be saved every year if parents would explain to their children the danger which attends cooling off too quickly after exercise, and the importance of not standing still after work or play, or remaining exposed to a wind, or sitting at an open window or door, or pulling off any garment, even the hat or bonnet, while in a heat. It should be remembered that a cold never comes without a cause, and that in four times out of five, it is the result of leaving off exercise too suddenly, or of remaining still in the wind, or entering, while heated, a cooler atmosphere than that in which the exercise has been taken.

Windmills.—Will you, or some of the correspondents of the *Cultivator*, inform me through its valuable pages, what the power of a windmill would be, whose diameter is eight feet, and having eight vanes, from twelve to sixteen inches wide. Would it be too heavy if the wheel weighed one hundred pounds? Where is Elgar's self-regulating windmill made? R.

Our correspondent may easily make his own calculations, by first ascertaining the surface of all the vanes in square feet, and then allowing one-tenth of a pound on the square foot for a light breeze, two to three-tenths for a gentle wind, one pound for a brisk wind, two to three pounds when very brisk, and four to six pounds for a high wind. The windmill mentioned would be much too large and heavy for anything but a self-regulator—unless constantly watched, it would be soon broken to pieces. We do not know where Elgar's is made.—*Country Gentleman.*

OBSERVATIONS ON STORMS.

1. The Atlantic ocean is the source of nearly all the rains which visit this part of the country. The moisture collected from the great lakes is small in quantity, travels but a short distance, and usually falls to the Northward of this parallel. The Gulf of Mexico sheds its vapors on the great Western valley. From the Northern ocean and the rivers flowing into it, hardly any moisture is evaporated.

2. The heated air ascending from the surface of the Atlantic, especially from the Gulf Stream, is wafted over the land, by winds which usually blow at a right angle to the general coast line During nearly the whole of last week such a breeze blew from the Southeast. It was hot, damp, and felt oppressive on account of the quantity of moisture it contained.

3. No rain storms are experienced, or even heavy showers, after the wind has been blowing steadily from the Northwest, this being a dry current, and absorbing instead of giving out moisture.

4. After hot days, during the summer season, the sea breeze usually sets in toward evening. On reaching the mountains this current comes in contact with a cooler one, from the opposite direction, when there is apt to be a thunder shower, followed by the ordinary Northwester. The storm occurs along the line of collision between those opposing currents, and of course travels in the direction of the ocean.

5. When a Southeaster has prevailed for a time at any season, it is reasonable to expect a corresponding heavy rain, as the clouds have a great quantity of moisture to deposit. At the same time the coolness which succeeds will usually be in about the same ratio, the wet surface of the ground absorbing much of the caloric in the lower atmosphere.

6. The Northeast storm is probably in every case caused by one of those circular storms, termed "Cyclones," whose centre is some distance to the eastward. In such a case the storm travels from Southwest to Northeast, or in the contrary direction to that in which we feel the breeze blowing. If accurate observations were made as to the changes in the wind, the centre of the tempest might be calculated with tolerable accuracy. In proportion to the length of time, and the strength and coldness of current, the storm will probably be more or less severe. A correspondent, who has long made this subject a study, remarks that the Northeasters are seldom experienced west of the Alleghanies.

7. It is remarkable that on this side of those mountains, storms scarcely ever blow from any of the cardinal points of the compass. Any exceptions are believed to be only cases when the wind is turning, or rather when persons are en-

tering into or passing out of the track of the tempest.

These observations might be multiplied to a great extent; but probably comprise the most important facts in relation to the storms which are experienced in this part of the country. To those who are not familiar with the subject, they will serve to explain, in part, the more immediate causes of those phenomena.—*New York Commercial Advertiser.*

WOOL AND MUTTON SHEEP.

Evening discussions are becoming an important part of the proceedings at the New York State Fairs. We copy from the *Rural New-Yorker* the following abstract of the remarks on Sheep and Wool Growing.

WADE, of Port Hope, C. W.—Canadian farmers prefer the long-wooled mutton sheep, as a general thing, because they can make more money by keeping them than the fine-wooled. They are more healthy, and though the wool sells for less per pound, the larger fleece brings a higher price to the farmer.

PETERS.—How do you feed?

WADE.—Feed well, winter and summer. Grow great quantities of roots, and find them almost indispensable in sheep keeping, but give anything they relish, and all they will eat. It is nonsense to keep any animal poor. In winter principally feed turnips, hay and a few oats. The fleeces average eight pounds each, when well washed. Prefer the Leicester crossed with the Cotswold. The Cotswold has a heavier carcass and better constitution. The sheep, however, that we now have are modifications of the old breeds whose name they bear. The Leicesters were much modified and improved by BAKEWELL, who bred in-and-in for the purpose of improving the form, which he accomplished, but in doing so sacrificed the constitution to a certain extent. It is therefore well for the grower of long-wooled sheep to gain constitution in the way I have mentioned.

JOHN S. PETTIBONE, Vermont.—I have always recommended the farmer who has only land enough for fifty or one hundred sheep, to keep those best for mutton. But, under other circumstances, fine-wooled are most profitable. I commenced raising Merinos forty years ago, and have continued to this time without admixture or cross. The greatest difficulty with sheep raisers is that they let their flocks run down in October when the pastures get poor. Unless a person is a good judge he cannot tell when his sheep are losing flesh, and thus many are deceived and their flocks get in low condition before they are aware of it. No one can judge of the value of a sheep when the wool is off. Once I selected two ewes which I considered as near alike as possible, but at shearing time one gave five pounds of wool and the other three. Always examine them in January, and when I find a ewe with long, soft, thick wool, I mark it for myself, and no one can buy it.

A FARMER.—Do Vermont sheep-raisers grease their sheep?

PETTIBONE.—I have no doubt there is a good deal of fraud practiced, but I never greased a sheep in my life. Merino wool will be somewhat greasy, but there is a great difference in this respect. I know a gentleman who had a ewe which sheared thirteen pounds of very greasy wool. One of mine sheared five pounds, and yet, when cleaned, my five-pound fleece was one pound the heaviest. Those sheep with extremely greasy fleeces, should be discarded, as the wool becomes cold, and the sheep chilled. They will freeze almost as quick as a cabbage plant, and need blanketing in the barn. By a careful selection of ewes I am enabled to get a hundred good lambs from a hundred and one ewes, and can do this every year. A pen 40 feet in length by 15 in width, is room enough for a hundred sheep in winter, and they will do better than where more room is provided.

BAKER, of Steuben Co.—Have kept Merino sheep all my life. Commence in October, as soon as pastures get poor, and give a little grain until winter sets in. Then take into the sheds. Give them hay in racks, twice a day, and more or less grain. Stable all winter. Keep 400 sheep in one barn 90 by 45 feet, divided into three parts by a low board fence. The product of my sheep averages about $2 per head. Feed considerable straw, and when I do this continually for any length of time, give grain. Usually feed roots to ewes some twenty days before lambing. The turnip is a somewhat uncertain crop, but beets are sure and valuable. Have kept eight hundred a year on less than two hundred acres, including hay and pasture. The fleece averages from 4¼ to 4½ pounds each. The wool is somewhat greasy, but not what may be called gummy. I think it very desirable to increase our flocks, for the purpose of keeping up the fertility of the land. There is nothing like it. Have raised 120 bushels of shelled corn on an acre, where sheep had been kept. Have had no experience with coarse-wooled sheep.

HARMON, of Monroe Co.—Some 40 years ago commenced with Merino sheep. After five years' trial of these, obtained an imported Leicester buck, which resulted in detriment to the flock, and this cross I soon abandoned. Never let my ewes have lambs until three years old. The range of average weight of fleece in different years is from four to five and one-fourth pounds. Last year the product of 328 sheep in wool, was $707; the year before, from 330, $705. Feed but little hay; use straw, corn, oats and some bran. Put about 50 in a stable 14 by 40, and keep from fall to spring. Wash in running water until it ceases to be discolored. Let sheep run from five to eight days after washing before shearing. The wool is not gummy, but thick and fine. Feed in racks. Have some low land, which produces a grass that will keep sheep alive, but make no tallow. Believe long-wooled sheep tender. The wool is long and open, and parts, leaving portions of the skin almost bare. The water gets in and the sheep take cold and die. I lost several by consumption.

WADE.—Is not the crossing of the Merino ewe with the Leicester buck an unnatural cross? Did you ever try the Leicester ewe with the Merino buck?

HARMON.—Never have; never bred a long-wooled ewe.

ALLEN, of Black Rock.—Have kept sheep 25 years. My land is a clay loam; lies well up, with good surface drainage; natural to timothy, blue

grass, oats and corn. The best Canada farmers are mostly foreigners, and are somewhat prejudiced in favor of breeds of sheep popular in Europe. They certainly have most beautiful and magnificent animals of enormous size. They find them profitable, no doubt, but no man can eat them any more than he can eat a cake of tallow. Have seen these sheep in New York and they are bought by the keepers of large hotels, like the St. Nicholas, to grace the tables, but only a few ounces are eaten. The long-wooled sheep need shelter, for the wool parts, and in wet weather they get cold. They need grain in winter, and some roots; but in our climate, too many roots are apt to scour. The climate of England is different, and there roots are a necessity. Here corn takes the place of roots. They are beautiful sheep, shearing from five to eight pounds of wool.

BOWEN, of Orleans Co.—I can hardly sit still and hear such remarks about long-wooled sheep. I live only about thirty miles from the last speaker. I have yearlings that weigh 150 pounds. Don't know anything about the tendency of long-wooled sheep to take cold, but know they are hardier than the Merinos. Have kept sheep all my life. Long-wooled sheep in New York will bring $8 to $10, while Merinos are selling at from $1,50 to $3. There have been long, gaunt, worthless, long-wooled sheep in Western New York, and perhaps to these the objections stated will apply. My sheep are called Cotswold, though perhaps they are not purely of this breed.

ALLEN.—I acknowledge the long-wooled is a grand sheep, but it is not suited to all farmers under all circumstances. When farmers live near a railroad, where mutton sheep are in demand for market, it is better to raise mutton sheep. But, when distant from market, it is better to grow for wool. I have fed and fattened a great number of South Downs, and find it best to get them pretty fat on grain. They mature earlier than most any other sort, and bring more profit. At my place I find it most profitable to raise mutton sheep. Can raise as many lambs from South Downs as any others, and they make the best mutton.

DICKINSON, of Steuben—Can you tell, by tasting, the difference between mutton of the South Down and the Merino sheep?

ALLEN.—I think I can. The fleece of the Merino is oily. This oil comes from the flesh, and gives it a bad flavor. In eating Merino mutton you can almost taste the wool. The South Down wool is dry, and the mutton beautiful.

ROBINSON, of New York.—South Down mutton brings the highest price in New York, and next to that the Longworth sheep of Canada. Still, there is not that nice distinction made that should be. Samuel Thorn buys every fall poor ewes coming from the West, breeds from them, and fats both lambs and ewes, making a profit of $7 on each ewe he buys. This would be a very profitable business for the farmers in the vicinity of New York city.

RAKING MADE EASY.—Last summer, but rather late in haying time, we spoke of a new *Drag Rake*, made by Mr. S. HEYWOOD, of Claremont, N. H. We used it through the latter part of the last haying season, and have continued to do so this season, and the opinion formed of it then, is abundantly confirmed by our later experience with it. A farmer getting twenty tons of hay, had better pay $5 for it, than try to do without it. Price $1,25, sold by Nourse & Co., 34 Merchant's Row, Boston.

For the New England Farmer.

THE INJURED FRUIT TREES.

I have been watching, Mr. Editor, with a good deal of interest, for the full development of injury to fruit trees in this region by the severe frosts of the first days of May. I think it was on the morning of the second of May that the hardest of these frosts came upon us. It was so severe that ground spaded up the day before could be walked on with scarcely an indentation by the feet.

I think the injury to some classes of trees is much greater than is generally supposed. Looking at the cherry trees, for instance, I find that not only was the crop for this season entirely cut off, but the numerous spurs from which the fruit buds projected are nearly all killed. Consequently we can have very little fruit next season; for although numerous new shoots are being thrown out on young and vigorous trees, yet it is well known that these fruit spurs do not form on the first year of the new wood. Old trees can scarcely ever recover so as to come into full bearing, as their vital energy is exhausted to a great degree, while even younger trees can hardly be as prolific as heretofore. The only complete remedy is to commence at once the setting out of new trees.

The same remark applies also to the plum. The fruit spurs have been killed on plum trees to nearly the same extent as on the cherry. The trees are throwing out vigorous new shoots, but they will scarcely be available for fruit in less than two years, and even then the crop must be small, to say nothing of the danger that in the meantime the fungus, called the black wart, will get the upper hand. The prospect for plums is decidedly bad, but it is too good a fruit to give up. Perseverance may bring it round again to its old standard.

Quince trees are very badly killed—one-half the shoots, at least, being dead. Unlike most other fruits, the blow of the quince does not form on a bud of the preceding year, but on a newly formed shoot; and although the crop of the present year is nearly destroyed, and the trees very badly injured, there is nothing now to indicate that a fair supply may not be had the coming season.

Of pears there will be a few; but the fruit buds, and even many of the fruit spurs, have been killed to an extent never known before in this part of the country. Fortunately, the pear tree seldom throws out fruit buds in all its little spurs the same season, like the cherry, and consequently, the leaf spurs having generally escaped the frost, may form fruit buds for the coming year. Pear trees, so far as my knowledge extends, are making a very vigorous growth the present season. Some kinds, as the Bon de Jersey, have nearly escaped the effect of the frost,

while others, as the Bartlett and Beurre Diel, are nearly denuded of their fruit.

The damage to apple trees does not appear to be great. Some fruit buds were killed, but the crop was so great last year that comparatively few of them were formed.

As to peaches, nearly all the old trees are killed outright, while the young trees are making a very vigorous growth. We shall have peaches again in a couple of years, if some other disturbing cause does not intervene. E. C. P.

Somerville, 1861.

SUMMER.

The fickle year is in his golden prime,
The world is dreaming in a hazy lustre,
And round the altar of our summer clime
The blushing roses cluster.

Upon the mountain dwells impassioned light,
And in the valley sleeps a shade depressing,
While fields of waving wealth enchant the sight,
Like gold of God's own blessing.

The plowman rests beneath the wayside tree,
The stream curls slowly round the hoofs of cattle,
And o'er the meadow floats the droning bee,
Fresh from his flowery battle.

Soft through the southern meshes of the vine,
I hear the birds unto each other calling;
And in the casket of the eglantine,
The tropic dews are falling.

Far in the distance rolls the sluggish sea,
With not enough of life in all its breathing
To bid the sail from its rude bounds go free,
And spurn its hempen wreathing.

On all there rests a halo and a hush,
The spell of poesy is on the blossom,
And Nature's spirit slumbers in a blush,
Caught from high Heaven's bosom.

The past and future blend in one sweet sleep,
The world's a dream, and care a hidden murmur
Whose tears, however madly he may weep,
Are but the dews of Summer.

For the New England Farmer.

THE BUCKEYE MOWER.

This morning I witnessed the operations of the Buckeye mower upon the farm of Mr. Haven Ayer. The field contained about two acres, of as handsome herdsgrass, as I have seen, estimated two tons to the acre. About half of it was cut on Saturday, and now stood in cocks, covered with caps, that completely protected it from the wet of last night. The machine was drawn by two horses, weighing about 1100 pounds each. The average time for cutting an acre was about forty minutes. Mr. Ayer drove himself. He told me he liked the machine better than any other that he had used. I know that he has used Allen's and Manny's. His operations strongly confirm what you have said of the beneficial use of mowing machines. Near by Mr. A.'s field, I saw Mr. Tilton's wheat, now standing more than four feet high, and promising a rich harvest.

South Danvers, July 15, 1861. J. W. P.

How to Mulch.—The Editor of the *Prairie Farmer* while on duty with the "Farm Committee" heard a farmer scolding his hired man for putting mulch close to the body of trees, and thinks the following remark worth remembering as a guide to the proper way of applying mulch: "I should as soon think, said our friend Minkler, of tying a stocking about the ankle to keep the toes warm."

PREMIUM CROPS OF WHEAT.

The following statements were made by the three farmers to whom premiums were awarded on wheat, by the Hillsborough Co., N. H., Agricultural Society.

The land on which I raised this wheat is about half a mile north of Hillsborough Centre, on a high hill, the highest land cultivated in town, except in one or two instances, and so windy and cold that corn does not do the best. In 1859 the piece was planted, part corn and part potatoes, and manured with about 50 ox-cart loads of manure taken from the barn cellar. Last spring I plowed the land twice, about eight inches deep, and sowed four bushels of wheat, but the seed was threshed in a new machine and injured so that it did not all sprout. The result was that on 225 square rods of land I had seventy bushels of wheat—making 49 7-9 bushels per acre.

James M. Wilkins.

Hillsborough, Nov., 1860.

—

The piece contained 1 7-8 acres. Broke in 8157. One-half sowed with oats, and the remainder planted with potatoes, in 1858. In 1859, planted with corn—manure, 20 loads. 1860, sowed with wheat—raised 75 bushels—making 40 bushels per acre. Daniel Paige.

—

Herewith I respectfully submit to the Committee on Farms and Field Crops a statement of a crop of wheat I raised the present season and entered for a premium to the Hillsborough County North Society. The land on which I raised this wheat is situated in the south part of Hillsborough, near the Contocook river; is a light, loamy soil. Last year the land was planted with corn and manured with a shovelful of manure in the hill, only. Last spring I carted on twelve large ox-loads of long manure from the barn, spread and plowed it in, about seven inches deep, and sowed the wheat about the middle of April. The result was I had thirty-five bushels of good wheat, on just one acre of ground. S. N. Sawyer.

Hillsborough, Nov. 7, 1860.

A Special Manure—*Not Patented.*—At the Woodbury plowing match Mr. John Daw told the following anecdote:

Having drained a field where nothing had ever grown before, I was standing near looking at a crop I had there, when a neighboring farmer came up. We had one or two loose farmers in our neighborhood; one of them, in fact, came from Woodbury, [laughter;] but that is not the man I am speaking of. He came up to me and said:

"That is a bootiful crop! How did you get it, sir?"

I replied, "Brains." [Laughter.]

"What! manure the field wi' brains?" [More laughter.]

"Yes." [Renewed laughter.]

"Goodness, yer honor, where did you get 'um?" [Roars of laughter.]

LADIES' DEPARTMENT.

DOMESTIC RECEIPTS.

DRYING THE COMMON RED CURRANT.—We copy the following method from the last number of the *Horticulturist*. Many of our readers will find it just in time to give it a fair trial. The editor of the *Horticulturist* having examined the currants prepared in this way, highly commends it.

The currants should be quite ripe when gathered, with the stems attached, and washed or rinsed effectually and drained off. Then stem them and wash them thoroughly, and to each pound of currants add a quarter of a pound of good Havana sugar; then place them in a preserving kettle over a fire until they come to a *scald heat*, when they are turned out into white earthen dishes, and exposed to the action of the sun until, by evaporation they become hardened on the upper side. Then they are turned over, and there remain until they become so on the other side, and so alternate until they become a sort of leathery texture, when they are put away in earthen jars or boxes until wanted for use. Care must be taken to keep them from the dews of night and rains during the process of drying; finally, the utmost cleanliness should be observed from first to last.

When used, enough hot water is required to dissolve them or render them to any consistency suitable for tarts, jelly, &c. At the same time, more sugar is required to make them quite palatable, which must of course be governed by taste. Currants in this way have kept well with us for three years, and the presumption is that they will keep for a longer time, if well cared for.

HOW TO HAVE TENDER MEAT IN HOT WEATHER.—While referring to the flavor of fish, I would point out a very simple plan for ensuring tender meat, and baking it in the jungle. It is not generally known that if the flesh of any animal is cooked directly it is killed, so promptly in fact that the heat of roasting or boiling will warm it before its own animal heat has left it, it remains perfectly tender. Several days of keeping or hanging are required only for the purpose of removing that toughness and rigidity which newly killed meat acquires when cooling. Suppose then a wild fowl or a porcupine shot in the neighborhood of the camp, which is always supplied in the noon with a blazing wood fire; the first thing to be done is to cut and wash out the trail, or gralloch the porcupine, while an attendant mixes up some clay and water into a thick paste, which is quickly smeared all over the animal, the quills or feathers giving it a firm hold This strange looking mud-pie is then laid in the fire, which first dries and bakes the mud covering into a seamless earthen vessel, which retains the juice of the meat while baking; some experience is requisite to determine the time for removing the dish and placing it on the table or the ground, when a blow with the tent peg separates the case with its quills and feathers, and gives access to the carnal kernel within.—*Dunlop's Hunting in the Himalaya.*

TO REMOVE STAINS FROM THE HANDS.—Damp the hands first in water, then rub them with tartaric acid, or salt of lemons, as you would with soap; rinse them, and rub them dry. Tartaric acid, or salt of lemons, will quickly remove stains from white muslin or linens. Put less than half a teaspoonful of the salt or acid into a tablespoonful of water; wet the stain with it, and lay it in the sun for an hour; wet it once or twice with cold water during the time. If this does not quite remove it, repeat the acid water, and lay it in the sun.

TO MAKE BAKER'S YEAST.—Boil two ounces of hops one hour in nine quarts of water; take seven pounds of mashed potatoes, when the liquor is milk warm, and add one pound of sugar, two ounces of carbonate of soda, half an ounce of spirits of wine, one pound of flour, and half a pint of brewer's yeast to work it.

WOMAN AND HOME.

There is a bundle of delight bound up in the sweet word, home. The word is typical of comfort, love, sympathy, and all the other qualities that constitute the delights of social life. Were the every-day enjoyments of many of our pious, intelligent and affectionate families faithfully portrayed, they would exceed, in moral heroism, interest, and romance, most of the productions of the pen of fiction. The social well-being of society rests on our homes, and what are the foundation stones of our homes but woman's care and devotion?

A good mother is worth an army of acquaintances, and a true-hearted, noble-minded sister is more precious than the "dear five hundred friends."

Those who have played round the same doorstep, basked in the same mother's smile, in whose veins the same blood flows, are bound by a sacred tie that can never be broken. Distances may separate—quarrels may occur, but those who have a capacity to love anything, must have at times a bubbling up of fond recollections, and a yearning after the joys of by-gone days. Every woman has a mission on earth. There is "something to do" for every one—a household to put in order, a child to attend to, some class of unfortunate, degraded or homeless humanity to befriend. That soul is poor, indeed, that leaves the world without having exerted an influence that will be felt for good after she has passed away.

There is little beauty in the lives of those women who are drawn into the gay circles of fashionable life, whose arena is public display, whose nursery is their prison. At home, in the inner sanctuary of home life, woman appears in her true glory.

EVERYBODY is interested to know how to drive away mosquitoes. Camphor is the most powerful agent. A camphor bag hung up in an open casement will prove an effectual barrier to their entrance. Camphorated spirits applied as perfume to the face and hands will prove an effectual preventive; but when bitten by them, aromatic vinegar is the best antidote.

THE finest composition of human nature, as well as the finest china, may have flaws in it, though the pattern may be of the highest value.

FANNY FERN ON SONS-IN-LAW.

Fanny Fern, having lost her eldest daughter in marriage, makes the following reflection, by her rather significant. When she penned them Doesticks had probably just declared his intentions:

"How any young fellow can have the face to walk into your family, and deliberately ask for one of your daughters, surprises me. That it is done every day does not lessen my astonishment at the sublime impudence of the thing. There you have been, eighteen or twenty years of her life, combing her hair and washing her face for—*him!* It is lucky the thought never strikes you while you are doing it, that this is to be the end of all. What if you were married yourself? that is no reason why she should be witched away into a separate establishment just as you begin to lean upon her, and feel proud of her; or, at least, it stands to reason that after you have worried her through the measles, the chicken-pox, scarlet fever and whooping cough, and had her properly baptized and vaccinated, this young man might give you a short breathing time before she goes. *He* seems to be of a different opinion; *he* not only insists upon taking her, but upon taking her immediately, if not sooner. He talks well about it—very well; you have no objection to him, not the least in the world, except that when the world is full of girls, why couldn't he fixed his eye on the daughter of somebody else? There are some parents who are glad to be rid of their daughters. Blue eyes are as plentiful as berries; why need it be this particular pair? Isn't she happy enough as she is? Don't she have meat, and bread, and clothes enough, to say nothing of love? What is the use of leaving a certainty for an uncertainty, when that certainty is a mother, and you can never have but one? You put all these questions to her, and she has the sauciness to ask if that is the way you reasoned when father came for you. You disdain to answer, of course; it is a mean dodging of the question. But she gets round you, for all that; and so does he, too, though you try your best not to like him; and with a 'Well, if I must, I must,' you just order her wedding clothes, muttering to yourself the while, 'Dear, dear, what sort of a fist will that child make at the head of a house? How will she ever know what to do in this, that, or the other emergency!—she who is calling on 'mother' fifty times a day, to settle every trifling question! what folly for her to set up house for herself!' How many mothers have had these foreboding thoughts over a daughter! And yet that daughter has met life, and its unexpected reverses, with a heroism and courage as undaunted as if every girlish tear had not been kissed away by lips that, alas! may be dust, when the baptism and womanhood comes upon her."

THE NEW FLORAL BEAUTY.—The new pink, *dianthus Heddewigi*, which took the prize, as the finest floral novelty, at European exhibitions last year, is now being very extensively grown in this country. Considerable quantities of the seed have been imported, and almost all of the prominent florists now have the young plants on sale. It is easily raised from the seed, and is a strong and vigorous grower. The flowers are said to be beautiful beyond description. They are nearly three times larger than other pinks, are of rose, crimson and violet colors, with some delicate marble shades, white and mottled flakes. The plant grows to a foot in height, is covered with a profusion of flowers, and presents a most magnificent appearance. The flower is named after its introducer, a Russian gardener.

LAVENDER WATER.

The following recipe for the manufacture of lavender water is given by Mr. Piesse in his Scientific Melange for Young People:

"The flowers must be gathered, with as little stalk as possible, then place them in a jar three parts full of sweet olive or almond oil; after the flowers have been in the oil from twelve to twenty-four hours, the whole must be put into a coarse cloth, and the oil forcibly squeezed from them, then fresh flowers must be added, and this process repeated for twelve days, according to the strength of the perfume desired. When the odor of only one flower is required, an incredible quantity of flowers are necessary to produce a scented oil, and for that purpose they would require special cultivation.

In England no less than about 270 acres of its precious land is devoted to lavender farming. Each acre yields say 6200 pounds of flowers. A 100 pounds of flowers give up by distillation about one pound of the otto of lavender; and thus we learn that there is an averge production of 7000 pounds of lavender otto annually. It requires six ounces of this to make a gallon of lavender water, so that Britannia and her children—you know their names, Jamaica, Canada, Australia—together with a few visitors, America, Germany and Russia, use, and take home with them the enormous quantity of 17,000 gallons of this favorite spirit. The lavender farms of England are situated at Mitcham in Surrey, and at Hitching in Hertfordshire. At Mr. Perk's farm, of the latter place, the lavender when in blossom is resorted to by all the bees for miles round. The sound of their hum in such vast numbers is quite enchanting; nor do the butterflies neglect to visit so luxurious a feast, the taste of which appears to be particularly grateful to them. The bees' love for the lavender is so excessive, that at the harvest time, as the sprays fall before the sickle and are tied up into sheaves, they will follow it even at a sacrifice of life into the boiling still."

HOW THE JAPANESE RESTORE FADED FLOWERS.—After a bouquet is drooping beyond all remedies of fresh water, the Japanese can bring it back to all its first glory by a simple and seemingly most destructive operation. A writer at Nagasaki says: I had received some few days ago a delightful bunch of flowers from a Japanese acquaintance. They continued to live in their beauty for nearly two weeks, when at last they faded. Just as I was about to throw them away, the same gentleman (Japanese) came to see me. I showed him the faded flowers, and told him that, though lasting a long time, they had become useless. "O no," said he, "only put the ends of the stems in-

to the fire, and they will be as good as before." I was incredulous; so he took them himself, and held the stems' ends in the fire until they were completely charred. This was in the morning. At evening they were again looking fresh and vigorous, and have continued so for another week. What may be the true agent in this reviving process, I am unable to determine fully; whether it be heat driving once more the last juices into every leaflet and vein, or whether it be the bountiful supply of carbon, furnished by the charring. I am inclined, however, to the latter cause, as the full effect was not produced until some eight hours afterward, and as it seems that, if the heat was the principal agent, it must have been sooner followed by visible changes.

Lime for Green Flies and Rose-Hoppers.—A few days ago, we discovered that a number of our rose bushes were thickly covered with the green-fly and rose-hopper, and tried what effect air slaked lime would have upon them. Bending the branches over so as to expose the underside of the leaves, they were thoroughly dusted, and in particular, all the young shoots where the green fly was most abundant, leaving the plants quite white. On examining them afterwards, we found that wherever the lime went, the insects had disappeared, and they are now clearer than they have been for years, although care has always been taken to destroy these insects by soap suds, and even tobacco water applications.—*Ohio Farmer.*

YOUTH'S DEPARTMENT.

CRACKING A COMMANDMENT.

A little girl once went with her mother into a shop; as she stood there she saw a basket of oranges for sale. They looked ripe and juicy. While her mother was engaged in another part of the store, she kept looking at the oranges. They made her mouth water, and the thought came into her mind: "O! I wish I had one of them." This was the beginning of the temptation. She ought to have resisted this, and turned away from them; but she didn't; she kept looking at them, and the longer she looked, the more she wanted one. At last, watching her opportunity when no one saw her, she grabbed an orange, put it in her pocket and walked away. In a moment her conscience began to trouble her; she felt very uncomfortable indeed. Presently she sidled up to the basket and put the orange back again. Still she kept looking at it. She was tempted again to take it, and again she put it back.

As she walked home with her mother, she looked and felt very sad. When they were alone she burst into tears, and said: "O mother! I have *cracked* one of the Commandments. I didn't break it; I didn't quite break it, mother, but I'm sure I cracked it."

This little girl did right in putting the orange back. This kept her from quite breaking the commandment; but if she had resisted the *beginning* of the temptation, by turning away from the orange the moment she felt a desire for it, she would not have even cracked the commandment. We must resist *little temptations*, the very *beginnings* of evil. We must also pray to God to keep us from temptation. This is what Jesus has taught us to do every day, when in the Lord's prayer we say—"Lead us not into temptation."—*King's Highway.*

THE POWER OF ONE GOOD BOY.

"When I took the school," said a gentleman, speaking of a certain school he once taught, "I soon saw there was one good boy in it. I saw it in his face. I saw it by many unmistakable marks. If I stepped out and came suddenly back, that boy was always studying, just as if I had been there, while a general buzz and the roguish looks of the rest showed there was mischief in the wind. I learned he was a religious boy and a member of the church. Come what would, he would be for the right.

"There were two other boys who wanted to behave well, but were sometimes led astray. These two began to look up to Alfred, and I saw, were much strengthened by his example. Alfred was as lovely in disposition, as firm in principle. These three boys began now to create a sort of public opinion on the side of good order, and the master. One boy and then gradually another sided with them. The foolish pranks of idle and wicked boys began to lose their popularity. They did not win the laugh which they used to. A general obedience and attention to study prevailed. At last, the public opinion of the school was fairly revolutionized; from being a school of ill-name, it became one of the best-behaved schools anywhere about, and it was that boy Alfred who had the largest share in making the change. Only four or five boys held out, and these were finally expelled. Yes," said the teacher, "it is in the power of *one* right-minded, right-hearted boy to do *that*. He stuck to his principles like a man, and they stuck to him, and made a strong and splendid fellow of him."

MY MOTHER.

I am now so far advanced in life that my friends begin to call me old. But I have not lived long enough to learn why I should not still respect my mother, and regard her affectionately. She is quite advanced in years, and has nearly lost her sight. She sits within a few feet of me, sewing up a rent in my linen coat while I write this. She knows not what I am writing. She has been a widow eight years, and is still toiling for the welfare of her children. She has never studied grammar, nor philosophy, nor music. These things were seldom taught in her young days; but she knows their value, and has toiled many a hard day to purchase books for children, and support them at school. And shall I now curl the lip in scorn, or blush in company, to hear her substitue a verb of unity for one of plurality, or pronounce a word twenty years behind the Websterian era? Never—no, never! The old dilapidated grammar in my library might testify against her style; but its testimony would be infinitely more terrible against my ingratitude. I recollect well when she rode seven miles, one cold winter's day, to sell produce and purchase that book for me, when I was a little boy. It required a sacrifice, but "mother made it."—*Home Journal.*